TRANSACTIONS
OF THE
WEST LONDON
MEDICO-CHIR. SOCIETY

VOL. III

PROCEEDINGS

OF THE

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.

VOLUME THE THIRD.

Sessions 1886-7 and 1887-8.

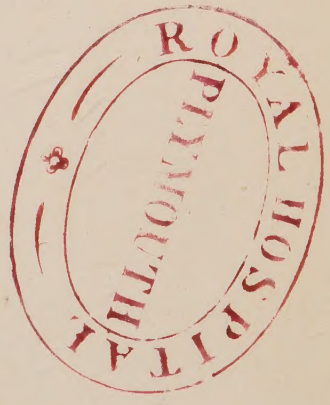
EDITED FOR THE COUNCIL

BY

H. PERCY DUNN, F.R.C.S.,

AND

S. D. CLIPPINGDALE, M.D.



LONDON:
BAILLIÈRE, TINDALL, AND COX,
20 & 21, KING WILLIAM STREET, STRAND.
[PARIS AND MADRID.]
1889.

PREFACE.

THE two years which have passed since the publication of the last Volume of the Proceedings have shown in many ways how much the West London Medico-Chirurgical Society has added to its popularity, usefulness, and importance. The average attendance at the meetings during the sessions included in this Volume has been respectively forty-five and forty-seven—a record, under the circumstances, which can only be regarded as highly satisfactory. The membership of the Society has increased to upwards of three hundred; and the list of honorary members has been augmented by the names of Sir WILLIAM JENNER, Sir JAMES PAGET, Sir SPENCER WELLS, Mr. JONATHAN HUTCHINSON, and His Excellency Dr. JOHN DUNCAN, of St. Petersburg.

The deaths of the following members have occurred during the past two years: Dr. VINCENT AMBLER, of Colville Square, Bayswater; Mr. W. H. THORNTON, of Margate; Mr. J. W. C. MERRIMAN, of Kensington; and Dr. JAMES FORSTER MACCONAGHY, of Uxbridge.

The Cavendish Lecture for the Session 1886-87 was delivered by Sir ANDREW CLARK, Bart., and that for the Session 1887-88 by Sir WILLIAM STOKES, and both of these Lectures are published *in extenso* in this volume.

In conclusion, the Editors deem it right to add that no responsibility is assumed by the Society for the opinions, statements, or arguments which occur in the communications which are published herewith under the authority of the Council.

H. PERCY DUNN.
S. D. CLIPPINGDALE, M.D.

April 24th, 1889.

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(Corrected to March, 1889.)

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Wright, W. G.	...	7, Peel Terrace, Gosport, Hants.

Corresponding Members.

Atkinson, J. M., M.D.	...	Civil Hospital, Hong Kong.
Beckingsale, D. L., M.D.	...	Granville, British Columbia.
Davis, Surg. E.	...	Army Medical Department.
Edwards, Surg. A. R.	...	Bengal Army.
Harvey, Surg.-Maj. R., M.D.		Do.
Hendley, Surg. H.	...	Do.
Hendley, Surg.-Maj. T. H.		Do.
Huggard, W. R., M.D.	...	Davos Platz, Switzerland.
McCulloch, Surg. T. C.	...	Army Medical Department.
Olding, T. F.	...	Shiraz, Persia.
Walsh, Surg. J. H. T.	...	Bengal Army.

STATEMENT OF ACCOUNTS FOR THE YEAR ENDING MAY 31st, 1887.

INCOME.

	£	s.	d.
135 Subscriptions	33	15	0
Balance in Treasurer's hands from last year	19	17	8
Subscriptions in arrear	35	0	0
Balance from Dinner Account in hands of Secretary ...	0	5	6
	£88	18	2

EXPENDITURE.

	£	s.	d.	£	s.	d.
Postage and Petty Cash				10	11	0½
Churchman for Printing and Stationery ...				11	1	11
Refreshments—						
Grocer	2	12	7			
Baker	1	18	5¾			
Whiteley	1	16	2			
Hire of Crockery	0	14	0			
Milk	0	3	7½			
				7	4	10¼
Wages				3	19	0
Miscellaneous—						
Hire of Microscopes	1	12	4			
Subscription to Medical Press and Circular	1	1	0			
				2	13	4
				35	10	1¾
Balance in hands of Treasurer	8	15	9			
Do. in hands of Secretary	9	6	9¼			
Do. do. from Dinner Account	0	5	6			
Arrears of Subscriptions	35	0	0			
				53	8	0¼
				£88	18	2

Audited and found correct, June 16th, 1887,

W. H. BLENKINSOP, M.D.
JAMES GLOSTER, M.D. } *Auditors.*

STATEMENT OF ACCOUNTS FOR YEAR ENDING MAY 31st, 1888.

INCOME.

	£ s. d.	£ s. d.
231 Subscriptions (annual and in arrear) ...		54 15 0
Balance from last year—		
In hands of Treasurer	8 15 9	
In hands of Secretaries	9 6 9	
		18 2 6
Subscriptions in arrear (Sessions 1885-6 and 1886-7)		12 15 0
		£85 12 6

EXPENDITURE.

	£ s. d.	£ s. d.
Publication of Transactions, Vol. II.—		
Printing (Churchman)	20 8 6	
Binding (Baillière)	5 10 0	
		25 18 6
Distributing Copies of Transactions to Members		2 5 0
Printing and Stationery—		
Annual Report	3 17 6	
Agenda Papers and Notices	8 9 0	
		12 6 6
Refreshments (ten meetings)—		
Grocer	3 11 11	
Baker	0 7 4	
Milkman	0 8 8	
Hire of Crockery	1 0 0	
		5 7 11
Ballot Box and Case		1 11 6
Wages, etc. (Servants)		3 15 0
Postage		7 9 5½
Petty Cash		0 3 0
		58 16 10½
Arrears of Subscriptions	12 15 0	
Balance in hands of Treasurer	14 0 7½	
		26 15 7½
		£85 12 6

Audited and found correct, June 29th, 1888,

R. J. BANNING,
LEONARD MARK, } *Auditors.*

SESSION 1886–7.

REPORTS OF PAPERS, CASES, DEBATES, ETC.,

AT THE

ORDINARY MEETINGS OF THE SOCIETY.

The inaugural meeting of the Session was held on Friday, October 8th, 1886, **Dr. Alderson**, the President, in the chair.

The whole evening was occupied by the delivery of the President's address, which is here appended, *in extenso :*

THE WANTS OF THE GENERAL PRACTITIONER OF THE PRESENT DAY.

GENTLEMEN,—In taking the chair for the first time as your President, it is my pleasant duty to welcome your return on this the opening night of the fifth year of the West London Medico-Chirurgical Society.

I hope that you have all obtained a good store of health, and have returned to professional work refreshed by sea breezes, Alpine air, mountain climbing, or shady vale; and as the outcome of this rest to the mind, and of health to both body and mind, we may again with confidence look forward to a continuation of the many excellent papers, upon which there will follow the vigorous and fruitful discussions that have so conspicuously distinguished the meetings of this Society. Ere I proceed, I desire again to thank you for the honour you have given me by my election as your President. I will not say that I could perhaps have desired that this honour had fallen into other and abler hands, but I do wish that I were able to address you with that force and oratory worthy the dignity of your President and of the position that this Society already occupies in our profession and amongst the medical and kindred societies of the Metropolis. I will not occupy time by dilating on my own defects, conscious as

I am of lacking much and many qualities that are essential for an efficient President; but it shall be my aim during my year of office to render my own unfitness as little apparent as possible, that the great prosperity of this Society may still continue, and that, by your help and with your support, I may hope to prove a not unworthy successor of the distinguished gentlemen who have preceded me in this chair.

Every honour has its corresponding responsibility, and the weight of office in the choice of a subject on which to frame my address quickly followed the pleasure of election. The selection, indeed, gave me much anxious thought and mental perturbation. My first choice was the Symptomatology of Disease, subsequently altered to the Science of Symptoms. This was changed to the Common Diseases of Children, especially whooping-cough.

The question of Craniotomy *v.* Porro's operation for a time occupied my thoughts, and although a question for all who practise obstetrics to consider, it was more fittingly the subject of an address by an able authority, Dr. Barnes, at the late Brighton meeting of the British Medical Association.

After writing, at least mentally, quires of paper on this and kindred topics, I came to the conclusion, and I trust wisely, that it was a general practitioner whom you had honoured, and only as a general practitioner could I, with any probability of success, expect acceptably to address you.

Upon the wants of the general practitioner of the present day I may perhaps speak with more confidence, for not only have I been engaged in actual and rather extensive practice for nearly a quarter of a century, and have a large circle of medical friends, but I have availed myself largely of the frequent opportunities that our profession, by the British Medical Association and the various medical societies, so fitly gives us for the exchange of thought, and for the enjoyment of friendships made, and for friendship-forming. Amongst our wants, I have included that of larger incomes, and have devoted considerable time and thought to this subject, and propose to consider the causes that are conducing to their, at present, not very gradual contraction, and the means for their future expansion.

I shall, of course, not refer to the great cause that affects all classes alike, commercial depression, although that presses with particular weight upon the medical man, but shall only consider such apparent causes of diminished incomes as appear to me to be more or less remediable.

I will call your attention to the want of hospital and various other medical appointments for the general practitioner; to the need of an alteration in the vaccination laws, by which every registered medical man who desires the appointment may become a public vaccinator. These subjects, and the question of Health Assurance, I will go rather fully into. I shall more briefly refer to the question of consultations, and shall close with a few remarks on recent medical legislation. I think that it may be received as an axiom that the incomes of general practitioners are only in isolated and exceptional cases as large as they deserve to be. The cost of living has very materially increased. House-rent is more. Taxes are much higher, food is dearer, servants' wages are considerably higher, stable expenses are also in increased ratio, and last, but not least, the cost of drugs and chemicals is to the honest practitioner a very serious item of expenditure; and with all these increased expenses our fees remain the same, our incomes are becoming smaller and unbeautifully less, in not a few cases contracting to the almost nothing point, and this, too, occasionally, without any fault of the unfortunate medico. Of course, when I speak of larger incomes, I speak collectively. I desire to see more money earned, or rather, not only earned by, but paid to, the profession. Men who have been fifteen or twenty or more years in active practice should ask, expect, and obtain larger fees than the young practitioner. We all know that almost the converse of this is too frequently the case, and that men in large general practice will accept a *very small fee*. Our fees are considerably less than those common in France, America, Australia, or of almost any of our Continental brethren. There is a levelling upwards wanted in this question of fees; the general practitioner of to-day is very much in advance of the doctor of half, or even a quarter, of a century back. In point of wisdom, culture, and experience he is daily nearing his great prototype, the successful and accomplished physician. Do not think I am a medical socialist—that I am one who has "yearnings for an equal division of unequal earnings." "Sed tamen amoto quæramus seria ludo."

The public should be taught to pay larger fees, and to value medical knowledge and skill more than they do; but the fault is not at all that of the public. The open surgeries, the provident dispensaries, the private clubs, the sick clubs, have much to answer for the low estimation and low charges of the family doctor of to-day. But if the matter is to be considered, and followed by any practical results, the initiative must come

from within, from those who rejoice in a "bald crown"; whose hair is already tinged with that best of all colours, iron-gray. If the older practitioners were to charge a larger fee, it would give a chance to our juniors, and give them less excuse for starting dispensaries, proprietary clubs, and other more or less objectionable methods of acquiring practice, and at the same time they would add much to their own comfort and gain increased respect from their patients.

One undoubted cause of the smallness of the larger number of medical incomes is the crowded state of the profession of medicine. Go where you will, inland or on the coast, in the Metropolis or in the country, large cities or secluded villages, it is the great exception to find a locality where the supply of doctors is not greatly in excess of the demand; as for the Metropolis and our large cities, our name is legion. It would, I think, be difficult for two out of a dozen medical men even to mention a place where there was any likelihood of a doctor succeeding, that had not already more than the number that could possibly earn a respectable income. Our worthy member, General Goldsworthy, mentions that he numbers eighty doctors in his constituency, a truth that I hope may convince him of the political, even if latent, power of the medical profession. The crowded state of all the ranks of medicine is an obvious fact. Sir Lyon Playfair never made a greater mistake than when he represented in Parliament that the contrary was the case. Dr. Billings, in his very able address before the British Medical Association at Brighton, gave some important statistics as to this. "In the United States and Canada there were 90,410 persons calling themselves physicians, *i.e.*, a proportion of one to every 600. In England and Wales, by the census of 1881, the proportion of physicians is only 5·8 per 10,000." But these facts are not at all comparable, for as the former includes every kind of charlatan calling himself a physician, the latter only includes registered practitioners. Has it not, therefore, become a question for our Direct Medical Representatives *in futuro*, whether some steps should not be taken by our somewhat torpid Medical Council to *reduce this excess, and to bring our too easily made doctors more within the requirements of the public and the profession?* for excess in numbers means poverty in quality; for how is a man who is crushed in poverty, lost in heart, consumed by biting care, to practise a profession that often demands profound thought, and always keen judgment and clear intellect? Medical men are languishing for opportunity of exercising their art, the

surgeon's hand is losing its cunning, and the skill of the physician is too frequently becoming irretrievably latent. And yet, while this is the case, Dr. Mapother told us in his address on Public Health, and I heard it with indignation, even as he mentioned it with shame, "that out of 1,300 students in Dublin, fewer of these are engaged in real hospital work as clinical clerks and dressers than there ought to be—that persons following other occupations from ten o'clock till late in the afternoon are permitted to pose as medical students." And although the proportion of doctors to the population is nearly a third less in Ireland than in England, yet these men whom you think would be satisfied men, if not doomed to the remote district of Skibbereen, are not content to remain in the land of the shamrock, but become our own competitors in the keen struggle for existence. In these days, when he who runs can read, when education is even cheaper than medical skill, has not the time come when every entrant to the profession of medicine should have some knowledge of Greek? for a knowledge of Greek is required of the student of every Continental country of importance. That the first class, second division, of the College of Preceptors should be the lowest standard for acceptance for registration by the Medical Council? At the same time, I object to any attempt to make the education of the doctor different from that of other gentlemen, and whether classics, the modern languages, or pure sciences should have the greatest weight in the matriculation examination of the medical student I care not, but I do think this entrance examination should give satisfactory proof that the examinee had shown both care and exactness, and exercised his faculty of observation, and, as boys are so proverbially careless, I think this arts examination should certainly for the higher degrees not be allowed to be passed until the age of eighteen or nineteen. For there are more errors, more serious mistakes committed from want of thought than from want of knowledge. The careless man ought to find no room in the roll of medicine, and if this were the case, many regrettable events known by most of us in medical life would never have occurred.

Sir John Lubbock, speaking at Birmingham on the unveiling of the statue of Sir Josiah Mason, said: "Technical education ought not to begin too soon," and this opinion appears to me to apply with special force to the study of medicine. Would it not also improve the tone of the profession, and, what is more important, prevent many errors that

now almost unavoidably occur in the early practice of its members—errors not so often from want of knowledge, but from want of experience—if the length of time required for a medical curriculum were wisely lengthened; surely four years is too short a time to acquire the increased technical and scientific knowledge now demanded, except by the sacrifice of practical experience and the shirking of clinical work.

In former years a pupilage was required, and many perhaps in this room spent three, four, even five years, with a medical man previous to entering hospital, learning routine but useful work. Now it is almost the universal custom to go direct from school to hospital, the young embryo medico picking up as best be can, but often very imperfectly I fear (if I may judge by some of my recent assistants), the knowledge of pharmacy, and of certain small but frequent ailments. A familiarity with such unimportant diseases as they may appear, is at least necessary to his early, if not to his ultimate, success. As a remedy, I would like to suggest that, in addition to the four years' professional training now required by the Examining Boards, every man presenting himself for his pass examination, or, at all events, before he was licensed for independent, *i.e.*, private practice, should give proof of having been an assistant to a medical man for one, or even two years, who held public appointments such as factory surgeon, district medical officer, or any similar appointments, where there would be good opportunities of acquiring practical knowledge. Of course, there would be an exception to this rule in favour of all those gentlemen who had filled the post of house surgeon, house physician, or obstetric assistant at any hospital that contained one hundred beds for six months; if at a smaller hospital the time must be lengthened accordingly. I would remind you that the minimum period of medical study in almost all other countries is longer than our own. In France and Spain, four years; four and a half in Germany, five in Austria, Russia, Belgium, and Portugal, six in Italy, Holland, and Denmark, seven in Norway, and even ten in Sweden (*Lancet*, September 11th). I am well aware that this question of prolonging the medical curriculum for five years has often been mooted, and never seriously entertained, on account of the objection that the public would be insufficiently supplied with medical men, and the extra expense of the already costly medical education that must follow a more lengthened period of study. But I do not suggest that these advanced students should be pre-

vented from earning anything towards their own support, but they should not be permitted to start in independent practice for themselves until a later date, when they had had some opportunity of gaining practical experience and judicious self-reliance under the supervision of older and experienced men. If some such proposition as this could become the rule, it would be a gain alike to the public and the profession, even though it might, and I hope it would, prevent a few very needy men entering the profession; as it is, we have too many needy men in our ranks—men who are entirely void of professional and gentlemanly feeling, and destitute of that *esprit de corps* that ought to animate every member of a noble and self-denying profession. It is often these men who are so hasty to commence practice, so anxious to shake off all that savours of the "*in statu pupillari*." They have their diplomas, the goal is reached, and the commercial spirit that is so strong within them must have vent, and they start their open surgeries, and establish provident dispensaries, and not even infrequently call in the aid of the advertisement column of the "local," in which they will parade the number of letters that rightly or wrongly follow their names. These, and other objectionable dodges and baits for practice, are unfortunately known to be practised; and thus they disgrace the profession they ought never to have entered, and then wonder, forsooth, why Medicine has not the same *locus standi* as her sisters, the Church and the Law. I repeat, if the curriculum were thus prolonged by one year of practical work at the expiration of the usual hospital career, the profession and the public would greatly benefit; the young medical man, by increased ease of mind and lessened anxiety, would be more than compensated for lengthened unremunerative work. It would become almost unknown for a case of extravasation of urine to be brought to a hospital unrecognised. Fractures would, perhaps, be always diagnosed and better treated. The practice of the bone-setter would diminish. Peritonitis would less frequently be mistaken for constipation or colic, and medical officers of health would have no grounds for asserting in their reports that medical men were incapable of diagnosing small-pox, not infrequently mistaking this serious disease for measles or chicken-pox.

It would, I think, be an omission to conclude my remarks on the causes of the contraction of medical incomes without any mention of provident dispensaries, sick clubs, home hospitals, and also fever hospitals. The subject of provident dis-

pensaries has already claimed and received the careful attention of the West London Medico-Chirurgical Society. Our first Cavendish lecturer made it the subject of his address, and an animated and interesting discussion followed. These dispensaries are a cause of bringing much discredit on those who practise medicine, and lower the dignity of our calling and lessen the influence of our craft. This society has expressed its opinion that private provident dispensaries exist only to the hurt and injury of the public and ourselves, and your Council has acted in the spirit and letter of Law 2 of this society. Early in last session we successfully put this law into action, and by our influence we closed, or rather caused one of these miscalled provident dispensaries suddenly to collapse, which had already begun to absorb the charity of the public, and to divert legitimate fees from the pockets of medical men. Sick clubs, as they are generally carried on by medical men, need, I think, only to be named to be condemned.

Home and fever hospitals here come in for consideration. The too universal practice of sending all cases of scarlatina, small-pox, and infectious diseases, to fever and other special hospitals is a great factor in the reduction of professional receipts. If this custom were only limited to small-pox and contagious fevers, and if I were sure the removal of these patients was for the public good, I would be silent, but I do think that I have seen cases of scarlatina and small-pox recover that would probably not have recovered had they been removed to a fever hospital, and I have occasionally known patients die that I thought might have recovered had they not been removed. Scarlatina is still endemic in England, and by these patients being removed from our care our practices are considerably contracted; but if it were only the poor who were removed to these fever hospitals, I would have hesitated to have called your attention to this fact, but well-to-do people, professional men, send their children who have contracted scarlatina to these more or less charitable institutions. I have in my mind's eye a patient of my own, of good social position, who sent his children when suffering from scarlatina to the fever hospital, not to save expense, but to ensure freedom from being the medium of infection. I know also of a professional gentleman who did the same, and rightly too, for he could not withdraw his son, who was on the eve of an examination, from school, as he must have done had he not availed himself of the fever hospital for his daughter, who had contracted

scarlatina. It is, of course, necessary that our fever patients should be absolutely isolated, and if isolation cannot be effectually carried out at home it is necessary, it is right, for them to be sent away. But are our fever hospitals the best place, the right place for our paying patients? If this step of sending scarlatina patients away from home, regardless often of the wishes of the little patients, is right—and in many cases I believe it is—should there not be fever homes in every district where patients with contagious diseases could be sent, and yet remain under the care of their own medical attendant? Homerton, and even the hospital in Liverpool Street, is too great a distance, and their removal there very certainly lessens the chance of recovery.

From fever hospitals we come to the question of Home Hospitals. Are these home hospitals required? In my opinion, as they now are carried on (we will take the one in Fitzroy Square as a type), they are not required ; they are inimical to our interests ; they are productive of silent but unhealthy friction ; they are more hurtful and annoying than the provident dispensaries, for the latter are frequented by the poor, who have always our sympathy ; but the patients of home hospitals are gentlewomen, ladies who are in comparative affluence, and who would scorn to think they were receiving charitable relief even in a remote degree. I have said we would take as our type the home hospital in Fitzroy Square. It is possible, and very probable, that this home is now self-supporting, but it was founded by funds obtained from the charitable public. I well remember the first meeting that was held at the Mansion House to advocate the claims of home hospitals, and the effort that was made to bring them into public notice and favour. If these homes are supplying a want, all well and good, but I do object to their existing merely for the convenience of the operating surgeon, the specialist, and the consulting physician. Not very long since a patient of mine discovered suddenly a small tumour in her breast. She did not consult me, although I had very recently attended her children through an attack of whooping-cough and herself in her confinements, but by the advice of her brother-in-law, who was a medical man, she went to an eminent London surgeon, who pronounced the tumour cancer, and that it must be removed at once, and advised her to go to the home hospital in Fitzroy Square. At this suggestion she demurred, and expressed a wish that the operation should be done at her own home. The surgeon

objected, and said he could not go to Kensington, or if he did, it would only be for the operation, and perhaps one visit afterwards. He did not add that one after-visit would, in all probability, be sufficient, and that she would then be safe in the hands of her family doctor. Now, I was told this lady paid fifty guineas for the operation, besides all the usual charges for the board, lodging, nursing, and other accommodation the home gave. Very possibly this lady never mentioned my name, as she had never consulted me about the swelling, but had the surgeon asked the name of her usual medical attendant she would, I am sure, have given mine. After she left Fitzroy Square, by his direction she went up to see him, and has ever since remained under his sole care.

This case represents forcibly that home hospitals exist, even if they did not originate, for the convenience of the renowned surgeon, the specialist, and the fashionable physician, but are antagonistic to the prosperity of the general practitioner. The practice of admitting paying patients, as is the present custom at a few of our hospitals, is perhaps to some of us still more objectionable, as it is then obligatory for the *paying* patient to be under the care of the physician or surgeon who is on the staff of the hospital.

Earnest as the profession has ever been to promote the public health, even against and contrary to its own interests, we cannot ignore the fact that the great advance of sanitary science—the improvement of, and the attention given to, the public health—especially for the last twenty-five years, is an obvious cause of the gradual diminution of medical incomes.

At the time of writing this paragraph the death-rate here is only 14 per 1,000, and this, too, in the season when diarrhœa and febricula are generally rife. The significance of this is apparent when I remind you that in the seventeenth century the death-rate was as high as 80 in 1,000; 50 in the eighteenth century; in the nineteenth only 20. When I first came to Hammersmith in 1863, we had no main drainage—typhoid fever, phthisis, and cancer were frequent causes of illness and death. Now to have a case of typhoid fever is the exception, and as for typhus, it occurs so seldom that unless great care is used, or the symptoms marked and severe, there is a danger of it being unrecognised by the usually careful observer.

The famous dictum of the late Lord Beaconsfield, "Sanitas sanitatum, omnia sanitas," is everywhere accepted, and is tending to become more or less the actual fact. It is therefore self-evident that the much-improved health of the public

has reduced our individual and collective incomes; and we rejoice in the improved health and happiness of the multitude, and aid this and every other effort for the public weal. Still, it has become a question with some of us whether we should continue to promote this desirable state of a healthy community merely from pure philanthropy. Could not the public also do better by enlisting our aid before disease has set in or even threatened? The State orders the appointment in every district of medical officers of health; should not the public in like manner make it the interest of the family doctor to keep them well, not on the Russian system, where the doctor's fee ceases as soon as illness commences, but on the principle of what is called "health assurance." Every man, ill or well, should pay a fixed annual sum to his medical man, sufficient to ensure skill and attention from the doctor for himself and family in the event of illness, in the same way as the poor man pays to his club doctor, only, of course, on a much increased scale. The rate must necessarily vary, according to locality, but should be generally fixed according to the house rent, social position, and means of the patient.

The subject of health assurance has been carefully considered by Dr. William Fleming Phillips, who has published a pamphlet advocating the custom, and explaining in detail how he has found it work in his own practice. To Dr. Phillips the comfort of this plan of payment has been great, and he speaks of it in a letter I received from him with much satisfaction. The scale of payment that Dr. Phillips mentions, except in a very poor and densely populated neighbourhood, is, I think, much too small, and can hardly be remunerative; neither should I like to adopt the plan Dr. Phillips proposes, of sending leaflets to our patients, advocating and introducing the system. I do not well see how we could avoid their falling into the hands of other men's patients, and they might lead or degenerate into a seeking for practice that would behighly objectionable. Health assurance, if it became general, would, in consequence of the very essence of its system of remunerating the medical public by fixed annual payments, paid in advance, do away with all bad debts. Our Christmas festivities and New Year's rejoicings would not be, as they now are, frequently marred by the sight of our big ledger and Christmas bills. Health assurance would prevent the frequent changes that a section of the public are prone to, of running from one doctor to another, and too often without reason, if fixed annual payments were the method of our payment; any

little friction that might occasionally occur between doctor and patient, and this not infrequently without any intentional fault on either side, would be kinetical, *i.e.*, on the sliding scale, and would doubtless right itself, and the usual mutual regard would in all probability return a long time before the annual payment was again due—at any rate, it would not be encouraged and reminded by a Christmas bill of unwelcome and unexpected amount, for illnesses, unless severe, are forgotten ; and perhaps of all causes of the undesirable custom of changing doctors, I believe the most frequent is an unpaid medical bill, or, less frequently (because of the distant date at which the bill is sent in), it may then appear excessive in amount ; this annoyance would cease, and the friendly regard between patient and doctor would be sensibly increased, by this new mode of medical payments. Our incomes would become more equal, not varying, as they so often do, depending upon the chance of an epidemic, or on the state of the atmosphere, and on the pockets of our patients, whether they can afford to call in our aid to a suffering wife or a sick child. It is surprising it is unknown by the public how often the comfort, the ease of mind, that the well-timed doctor's visit often gives is evaded on account of the dread of his Christmas bill, or more likely still, the consciousness that his last account is still unpaid. That the health of the public does suffer from delay in calling in medical aid I am quite certain of; in many families the rule is never to send for the doctor as long as they can possibly do without him—the family recipe, the patent medicine, the homœopathic globule, are all too frequently tried first, and much valuable time lost. This serious and reprehensible delay in seeking medical aid is often where you least expect to find it ; sometimes the patient is fearful of being thought fanciful, nervous, or hysterical, forgetting that these groundless fears may be a very sign of ill-health. Some such reasons as these for delaying sending for the doctor occurred lately in my practice. A young lady had been feeling unwell and feverish, and suffering acutely from pains in her wrists, elbows, and leg, from a Thursday evening. Believing it was not serious, no medical aid was sought until the following Tuesday afternoon, when I was sent for, and I had to surprise her friends by telling them my patient was suffering from that most dangerous malady, hyperpyrexia : her temperature, as tested by the thermometer, was 105·6°. The young lady, with this alarming temperature, was downstairs, although so ill that she could not rise from her chair without

great pain—indeed, to do so was, to use her own words, "an agony." It perhaps may not surprise you that, although this high temperature was successfully reduced by both salicylic acid and salicylate of quinine, an unfortunate relapse occurred, the temperature suddenly rose to 107°, and she, to my deep regret, died on the twelfth day after my first visit. Had advice been sought and the treatment applied earlier, might not this poor girl have had a better chance of recovery?

How many cases of pneumonic-phthisis we attend that originate in a simple catarrh, and for which there is no cause save that of a neglected cold! Does a winter ever pass without our attending a pneumonia, a case of pleurisy, that has been the result of measles that was so little thought of that no doctor was called in? Occasionally we are sent for hurriedly, perhaps in the night, as I was last winter, to a child dying from pericarditis with effusion. We learn the child had not been feeling quite well for the past week, but the parents did not think there was much the matter: "she was able to sit up yesterday; her breath was rather short, but she had only complained of a few growing pains." If a parent had his doctor always at his call without any extra expense, would he be likely ever to mistake acute rheumatism for growing pains?

A valued and aged medical friend objected to this system, as he thought if it were general our night-bell would be always ringing; but we do not find our club patients trouble us in the night, for night visits, like fractures, would rank as extras.

A lay friend once told me a rich relative of his valued as the greatest blessing of her wealth that she could send for her medical man whenever she felt to want him, and she believed that she prolonged her life by so doing. I am therefore, after having given the subject much thought, of the opinion that there is much reason for adopting this mode for our payment. I have often, in making out a bill of £50, £30, or even £20, felt a feeling of sympathy for my patient, whose means I believed were limited, that has caused me sometimes, and not infrequently, to strike out a consultation fee, a night, or a few evening visits, or some extra amount that has been charged for a prolonged visit, or for some extra service rendered, and which, too, was rightly charged for; and yet it is very rarely that I have a heavy bill paid me that the attendance has not given me more thought and greater anxiety than perhaps a dozen others whose amount did not exceed a £5 or £10 note. Should fixed annual payments ever become the usual custom of remunerating ill, or well, the family doctor, the appointment

of a Minister of Health, as suggested years ago by Dr. Richardson, would probably follow, conferring an honour and dignity upon the profession, health and happiness on the million, for medical men would of necessity have to see to the causes of the differences in the mortality average. Our medical officer of health has kindly given me the death-rate of twenty-eight large towns for the week ending August 28th, and I note while that of Hammersmith is only 14·3, and Bristol 13·8, and Bolton only 18, Brighton, the queen of watering-places, is as high as 22·4, Preston is 26, while Birmingham is 21, and Bradford only 16 per 1,000.

These differences would not be long without an explanation, and I fancy in time would almost cease to exist. Let health assurance become the general custom, medical men would never if possible sign a certificate of death without being convinced of the cause of the fatal disease, and, if a preventible cause, find out why and how the illness occurred; we should seldom have a troublesome or any serious case without searching out its origin and taking diligent and effectual care to prevent a recurrence. We should vie with one another, not as to the length of our visiting list, but on the healthiness of the district in which we practised. Our profession would gain in dignity, reverence, and respect, for we should be *preservers of health* as well as *healers of disease*. The doctor would then be able to rejoice in his month's holiday as easily as his now more favoured vicar, without having it spoilt or the calm serenity of his mind disturbed by pecuniary care, conscious that much was going out and but little coming in. For two or three summer months a third, or at least a fourth, of the medical men could easily and efficiently attend to the medical and surgical requirements of the public, and we should gladly arrange our holiday so that we could act as each others' *locum tenens*, for one important *sine quâ non* of this system would be that the contract should be annual, terminable, except by wilful or culpable negligence, only at the expiration of each year by giving three months' previous notice that the contract will not be renewed. Let the public only see it is their interest to adopt this plan of health assurance, and I believe it will become popular, and one of the many serious results of a long illness would be gone, and convalescence perhaps, in consequence of a quieter mind, be quicker obtained. The subject merits, and only needs, the thoughtful attention and combination of the profession and the public to make it a success.

Gentlemen, I fear I have occupied your time rather long as to the probable causes of the gradual contraction of our incomes. I will now turn to the more cheering and hopeful side—the means for their expansion. The profession is full of elasticity, full of energy, vitality, and action ; were it not so, and that I had no remedy to offer for an obvious fact—if I had only asked you patiently to endure the inevitable—my effort to-night would be as fruitless of result and as hopeless as was the task of Sisyphus. For any permanent improvement in the incomes of medical men we must have increased sources of revenue. Fresh medical appointments should be created, for the public require what the profession can give. I would suggest that pathologists should be appointed by the vestry in every district in the same manner as, and with a salary corresponding to, the medical officer of health, whose duty it should be to make or superintend and be responsible for every post-mortem ordered by the coroner. Medical men would be relieved from the making of post-mortems—a duty that, I think, would for the future be better performed by scientific experts not engaged in general practice. Post-mortems as conducted now are not, I fancy, as effectual in the prevention of crime as they might become, and are—at least, occasionally—causes of peril to the lying-in woman. Medical men would still be required in the coroner's court, and as witnesses their evidence would be of great and increased value, especially in criminal cases of suspected poisoning, more so than if the medical attendant of the deceased had himself made the post-mortem, for he must be more or less a prejudiced witness, according as he had previously from the symptoms during life formed his opinion that death was due or not to natural causes. As the law is, I believe a doctor would be very long before he would communicate his thought that possibly the patient was not receiving fair play, and then only on the strongest suspicion. I do not for a moment infer that any medical man would ever attempt to shield crime because of possible disagreeable sequences ; but he may occasionally dismiss suspicion from his mind that ought to be thought over, on account of the intense dread that is common to us all of causing misery to others that could never be effaced, or of bringing odium on one's self that could neither be forgotten nor forgiven, such as by exciting a suspicion that upon investigation might be proved to have no foundation. I could wish that this sometimes wholesome fear pervaded the legal mind a little more, so that our magistrates might perhaps

investigate in their private room during the earlier stages the disgraceful and often groundless charges that are now not infrequently made against well-known and respected medical men by worthless or hysterical women. My next suggestion is that every ship that carries passengers should have its legally qualified medical man. A sea-voyage is now one of our most important and (I can even speak from personal experience), one of our most satisfactory means of cure. It is our business to see that our phthisical patient, to whom we advise a voyage to Australia, Egypt, or Madeira, does not die on the way or the disease become aggravated by an attack of hæmoptysis that might have either been arrested or prevented had only the owner of the ship thought a doctor as necessary as a "cow or a stewardess."*

School Board examiners should be appointed from the ranks of medicine. There are, I feel sure, no lack of qualified medical men who would prove competent examiners; there are young medicals waiting for appointments, engaged in scientific research, to whom for a time such a post of usefulness might be acceptable. Medical men could best gauge the capacity of children, and would be more likely to recognise early any sign of brain pressure. Every school, public or private, that numbered over one hundred scholars should have its medical visitor, whose duty it should be periodically to inspect the school, and examine the children as to their physical health. By such appointments disease would then be earlier recognised, fevers and other contagious diseases would be much lessened, contagion would be almost prevented; skin ailments, such as scabies, scaldhead, eczema and the like, would cease. The eyesight of children would be preserved, and the juvenile in spectacles less frequently seen.

Death-certificates must be paid for by the State, for whose benefit they are given. Year by year these certificates are more reliable and of greater value, and ought no longer to be exacted from a hard-worked and laborious profession. Club and all other certificates should never be given gratis, but in the case of clubs the fee must be small; but the solicitor seeks for the appointment of commissioner of oaths, and does not consider the small silver fee for taking an affidavit incompatible with the dignity of his calling. Respectable and well-to-do tradesmen, whose rent is £60 or £100 a year, must not

* "Single ships are frequently advertised, as an inducement to passengers, that they carry a stewardess, and a cow, and *a surgeon if necessary*." —*Brit. Med. Journ.*, Sept. 4th.

join Foresters', Oddfellows', and other clubs, and expect the club to attend them when ill for 1d. a week, a sum always inadequate, and intended only for the wage-earning class.

The public are beginning to ask our opinion in sanitary and other matters as they never did before. It is not unusual to receive a letter from a patient asking if a certain locality is healthy and suitable for his or her constitution. We must let the public understand that, although we have given up the charging for medicines, we do charge for our advice; letters of advice, with or without prescription, must be paid for. More time is consumed in writing a letter than is occupied in seeing two patients in our consulting-room, but the public do not yet like to see this item charged in our Christmas account. In the early part of my address I mentioned that an amendment of the Vaccination Act is needed. If every general practitioner who desired were appointed a public vaccinator, although it would not add collectively to the money earned by the profession, and to some might appear to be robbing Peter to pay Paul, yet I deem it would prove to be the greater good for the greater number. It would in great measure do away with the odium that is now attached to compulsory vaccination, and while it would prove a public benefit, it would probably add £20 or £30 a year to many small incomes. (The sum of £175,956 was the other day voted by the Commons for efficient vaccination.) We should then be better able to supply ourselves with a store of healthy lymph, and thus the alteration of the Act would prove a great convenience to many of us, and would lead to the more efficient and frequent vaccination, and thus promote the public health. I for one strongly feel that there is an amount of coercion about the Vaccination Act that is detrimental to its efficient working. I believe that the practice of limiting the number of public vaccinators to two or three in a large district, and the custom of the guardians giving these appointments only to their district officers, as perhaps a compensation for inadequate salary, is greatly responsible for the unpopularity of vaccination amongst the poor, and is also responsible for the scarcity of the supply of vaccine lymph, which by its frequent inertness and occasional impurity gives a handle to the anti-vaccinator, and is antagonistic to the stamping-out of small-pox. As a result of this limiting the number of public vaccinators, lymph is wasted that is urgently required by many of us, and impure lymph is occasionally taken, and disease is disseminated. The public vaccinator can know little or nothing of the family

history of the child from whom he takes even perhaps a large supply of lymph; some of the healthiest-looking children at the age of three months have yet the germs of terrible disease existing unknown and unrecognised. The best and most successful of all vaccination is from arm to arm; it is the most painless and the most satisfactory. I have never found a child insusceptible to this plan of vaccinating. On the contrary, who of us has not failed over and over again when they have vaccinated either from tubes or with points supplied by Government, and often, though less frequently, with the points or tubes we have charged ourselves? Who is there who is not occasionally annoyed, and the cause of disappointment to a patient, by having no store of lymph by him that he likes to use? To write to the Local Government Board occasions delay, and then we only obtain two points, or one tube, and if you require to vaccinate two or three children this is not sufficient. I think if every general practitioner who desired were a public vaccinator, insusceptibility to vaccination would be almost unknown. The poor mother ought to be able to go to any general practitioner in her neighbourhood whom she might choose to select to vaccinate her baby, and at the public cost. The fee is not large, but, as the operation of vaccination gives little trouble, it is remunerative, and would ensure the majority of medical men being well supplied with lymph taken from the children of their own patients whom they knew something about. The compulsory nature of the Vaccination Act would appear sensibly less, and I do not think there would be as large a proportion of children unvaccinated, even in Leicester, where there are now as *many as ten thousand defaulters.*

My next, and perhaps my best, proposal, although rather an innovation, is that the staff of our hospitals should be paid. A generous profession has given what a wealthy nation should no longer accept, and what the profession should no longer offer. True, there are perhaps but few hospitals which could sustain at present this great addition to their expenditure, but it ought to be the interest of those who care for the sick and injured poor to reflect and consider, although it may be the glory of England's philanthropy, and please the pride of the Englishman to point to our noble hospitals supported by voluntary contributions, is it an equal honour to their rich governors and supporters that they accept for the patients of these grand buildings the gratuitous services of medical men? The way that the burden of the cost of the medical staff might

be easiest provided should be by Government grants,* for a little of the immense sums lavished by our School Boards on an unfitting education would show better results if spent in restoring the health and preserving the lives of our artisans, mechanics, and labouring poor. And now I come to a greater grievance under which we general practitioners groan.

We who thirst for knowledge, who by all the means in our power endeavour to make ourselves the deservingly trusted advisers of the public—"we who love knowledge, who would not fix her pillars, and rail not at her beauty"—do feel ourselves handicapped by such laws as pertain to many hospitals: "That no general practitioner should be eligible for the appointment either of physician or surgeon." As regards the very large Metropolitan hospitals to which a school is attached, some such rule as this may be necessary and healthful, for we must always have our great operators—surgeons who early in their career have shown proof of their surgical dexterity, and the special skill of an accomplished operator needs opportunity for its development and for the cultivation of a natural gift. A surgeon is born, not made, and yet no man can become a successful surgeon except by the frequent practice of his art; to me it seems, *ergo*, passing strange that a man who has the highest qualifications—a large practice amongst the rich, and perhaps a favourite with the poor—yet is outbarred by such a regulation as I have named, and cannot aspire to rank on the staff of the hospital of his neighbourhood.

At the present time, when there is so much talk about the mismanagement of the out-patients' department of our hospitals, it strikes me that it would prove a public good, and be a step in the right direction, if at least one of the assistant physicians and one of the assistant surgeons should be one of the general practitioners of the neighbourhood; and where the staff of the hospital resides miles away it would surely be an advantage to have a surgeon of both experience and age in call, ready for a sudden emergency. Did time permit, I could give instances where surgical skill is limited and surgical knowledge narrowed by the entire exclusion of the general practitioner from hospital appointments. Is not a regulation of this kind a professional grievance, a blot on deserving men?

Time bids me hasten to a topic that has of late absorbed much of the thought of the profession, and may almost be said to be the question of the hour. I allude to the ethics of consultations. The *British Medical Journal* of May 29th had

* A Government grant should be given to every important hospital according to its merit, and paid for out of the local rates.

a leader on the duties of the consultant ; this was followed by a circular sent to most, if not all, general practitioners, wherein it was given as the opinion of a new society, termed the Association of General Practitioners, that the dignity of the profession and the welfare of its members could be more effectually maintained by clearly defining the position which one section of the profession held in relation with the other consultant and general practitioners. This new association further recommends that the consultant should be applied to for advice by the practitioner, and not by the patient, and the advice should be given for the instruction of the practitioner in the management of the case, and not for the instruction of the patient, after the example of the legal profession, where counsel's opinion is given to the solicitor, and not to his client. They consider that a class of special consultants, who would only act in this higher function, was needed, and that general practitioners should almost pledge themselves to call in these consulting physicians to the exclusion of all others who would not bind themselves not to see patients independently of their usual medical man. The circulation of these advanced opinions among the profession called forth several replies. Leaders followed in most of the medical papers, and our weekly journals teemed with letters more or less lengthy on the subject. After thoughtfully reading and reperusing the circular mentioned, and talking the matter over with several of my medical friends and brother practitioners, I feel I could not go with the views advocated by this Association of General Practitioners. But I do think that the consultants should more frequently and, indeed, perhaps always, follow the practice of Sir James Paget, Sir Spencer Wells, Dr. Priestley, Dr. Gowers, who have invariably sent their prescriptions accompanied by a courteous letter to me, even when my patients had gone to them by their own desire, and even without my knowledge ; and this ought to be the universal custom. The opinion of the consultant would then be of more value, and do more honour to the dignity of medicine, and also tend to its nearer approach to the exact sciences in correctness—if it were the custom for the consultant to see no patient who was still under or had been recently under medical treatment by a general practitioner except in his presence and in consultation with him. Not so very long since a gentleman came to me rather irate, saying, " I took my wife to a physician this morning, and I find you have made a great mistake, for he told me she has very advanced Bright's disease, and can't live long." I replied with

great coolness: "It is possible that your wife may be suffering from Bright's disease, but that it is not *advanced* I am quite sure, for when I tested her urine a few weeks ago it was quite normal."* "Oh! well, the physician tested it, and said it was almost solid from albumen, and he considered her condition so critical that he refused *again* to prescribe for her until he had seen you." "Well," I replied, "I will go and talk the case over with him to-morrow morning, provided you will this evening send me some of your wife's urine, that I may carefully examine it." This he did. After carefully searching the field for more than an hour under a good microscope, neither myself nor my assistant (a distinguished scholar of the Westminster Hospital) could find the smallest cast, nor any evidence of Bright's disease; but there was a large number of small granular pus corpuscles. The urine was loaded with pus, and responded to every test for pus, and the small quantity of albumen that was present was due almost entirely to the abundance of pus; the patient had been suffering from peri- or para-uterine cellulitis after abortion, probably followed by an abscess in the pelvis of the kidney. I met the physician the next morning, and when I asked him if he had placed the urine under the microscope, or if he had tested for pus, he answered, "No." And when we subsequently met at the bedside, and I proved to him, by testing the urine in his presence, the existence of pus, he said, "Yes, you made a good shot there." I continued in attendance, and the patient recovered; but I feel sure she thinks she owes her life to this gentleman, and that he cured her from a malignant disease, because a tumour dispersed that was at one time diagnosed by another *physician*, who had seen her previously, as a dislocated spleen, and she frequently goes to the first-mentioned physician independently of me, only seeking my advice when too ill, or inconvenient to go to town.

On April 7th, a lady went with a letter from me to a leading obstetric physician whom she had been recommended to consult as to whether she was pregnant, and if so, whether she might go to the end of her pregnancy, as she had already had two children with great difficulty and by instrumental aid, the first stillborn, and the other dying when a few weeks old. The consultant, after careful and thorough examination, both digital and by speculum, wrote to me as follows: "I do not think Mrs. A. is pregnant. If she be so, there are as yet no

* This patient died suddenly last year from uræmic convulsions, but nearly *five years after* this diagnosis.

distinctive signs. The uterus is somewhat large, as though it had not perfectly contracted after her last delivery. I suppose the uterine inertia, which you told me was obvious during her last labour, has been prolonged after convalescence. There is evidence of want of tone and power in the uterus and appendages, and until this is restored, fresh pregnancy is less likely to take place." I replied: "The inertia that was evident before the birth of the child did not continue afterwards; the uterus contracted well, and the third stage of labour was in every way normal. The enlargement of the uterus was not due to sub-involution occurring after her last labour." I told the lady's husband the very reason that the physician gave for believing his wife was not pregnant confirmed me in my opinion that she was. Mrs. A. quickened five or six weeks after this, and was confined, on July 7th, with a living male child about the sixth or seventh month of gestation. Had I only accompanied my patient, I am quite sure the consultant would not have given as his opinion that Mrs. A. was not pregnant, neither in the former case would the consultant physician have diagnosed pus in the urine as evidence of advanced Bright's disease.

Consultations are needed both by the public and ourselves, and are very frequently followed by benefit to the patient, by comfort to relatives and friends, and by lessened and divided anxiety to ourselves. This is specially the case *when the consultation is suggested by ourselves; but* we cannot afford to be blotted out either by physicians or surgeons. In the cases of operations the general practitioner ought to be able to attend to the after-treatment of any operation. Neither ought the expert to pay more than one visit afterwards, unless requested by the surgeon in charge.

I am fearful I have already begun to tax your extreme patience, but at the present time, to close my address without one word as to recent medical legislation, to myself and to some of you would appear an omission.

The almost expiring act of the last Parliament passed the Medical Bill of 1886, when, to quote the words of the *Lancet*, "the profession had wellnigh lost faith in the power of Parliament to pass any Bill dealing thoroughly with the questions involved in any adequate scheme of medical reform."

The Medical Act Amendment Bill of 1886 still leaves much to be desired. It has dealt tenderly with vested interests. It does not give what was so urgently desired—a one-portal system—nor does it equalize the severity of the cost of what

should be equivalent examination. It is wanting in a penal clause; charlatans and herbalists will still flourish, sailing dangerously near, for the public safety, to the lines of medicine; and many of the recommendations of the Royal Commission were quite discarded. But the Act gives us for the first time a voice in the General Medical Council. True, we are but a small minority, "magnas inter opes inops," which I would construe, "helpless amongst great power," for wealth is power; yet we can make this minority, by a wise selection of our direct medical representatives, both powerful and effective.

At present I think we owe great gratitude to all of the medical press, who by powerful leaders have advocated our claims for a voice in the government of our profession; to the *Lancet*, *British Medical Journal*, Dr. Waters, Sir Lyon Playfair, and to Sir Walter Foster, to whose special action and unwearying energy this privilege was conceded. Whether this feeling of thankfulness shall last, and the Act continue to deserve the thanks of the profession, and the time, expense, and thought that it has cost our legislators, must depend upon the gentlemen the profession will elect as their direct medical representatives. I hope most of them, and in time all of them, will be chosen from the ranks of the general practitioners; but more important is it that they should be men who know and will study the wants and wishes of the large and important section of the profession whom they will have the honour of representing in the medical parliament; that they will carefully scrutinize the foreign diplomas they will be asked to register; and that they will see that the recommendations and the defects which the new inspectors of examinations may point out are both considered and rectified, so that the various diplomas will only be granted for the future to those who have shown a safe knowledge of medicine, surgery, and midwifery.

Dr. Mapother, in his most able and eloquent address on Public Health, gave it as his opinion that if the Apothecaries' Hall in Ireland be raised into a full licensing body (and the legality of so doing appeared to him questionable), the medical profession in Ireland will have lost far more than it will have gained by the Medical Act. I feel sure this applies with even greater force to the Apothecaries' Hall of England; and should the College of Physicians and the College of Surgeons still refuse them any share in granting their conjoint diploma, it is to be hoped that the profession will not have to submit to their granting a separate diploma, unless at

the same time the privileges for the future of the Hall's license should be curtailed, and that its future licentiates should only be permitted to practise as house-physicians, house-surgeons, or assistants to medical men and other subordinate posts until further qualified. The Hall would then again do useful work, would greatly lessen the number of unqualified assistants, and its license, necessary as it would become as a stepping-stone to practice, would be almost universally taken.

The Lunacy Act Amendment Bill is still waiting completion, and medical men are hesitating at signing certificates. A medical friend, a visitor in lunacy, told me the other day that in the country there is the greatest difficulty in getting certificates signed; yet I believe the time is not far off when, if we are not altogether relieved of this duty, every medical man who in good faith signs a lunacy certificate after patient and careful investigation will be secured from vexatious actions on the part of the assumed or recovered lunatic or his friends.

The late lamented death, by his own act, of an accomplished and successful physician, leads me to express what I have in my practice felt the need of, *i.e.*, mental sanatoria—retreats, not asylums—where we could send a patient who required, and who might even feel a conscious need of, mental rest, and to whom it would be a positive relief to know he was under kind and welcome medical supervision; but to make this method of cure both welcome and usual, we doctors must convince the public that the brain in this busy, stirring age needs rest, absolute rest, as much as any worn and tired organ, and that the stigma that is now so unfortunately attached to even a temporary abeyance of intellectual function ought never to exist. It is this stigma, the conscious dread of a possible clouding of the intellect, and the fear of the degradation and loss to himself and others that it appears must follow, that has cost, I think, the sacrifice of many a promising and incompleted life. Temporary insanity is more frequent than it used to be, and its too frequent termination is very saddening, while no form of insanity is so hopeful and so curable; but functional as it is, and curable as its very name implies, if mismanaged it may end in the dreaded termination, and if by watchful care this is prevented, may lapse into profound and hopeless melancholia. I have often thought the founder of our Indian Empire, Lord Clive, who died by his own act when only forty-nine, died because his disease was never recognised, and no precautions were taken to prevent the sad ending of

an eventful and glorious life, although in early years he had twice attempted suicide. An Englishman must be the major-domo in his own house, and it is almost impossible in consequence to cure a case of melancholia, even in an early stage, in the patient's own home, surrounded as he is by the very circumstances, real or imaginary annoyances, that have conduced to his loss of mental health. It behoves the profession and the public to minimize and eradicate the present *stigma* attached to lunacy, for it is for this reason that patients are frequently not soon enough placed in that condition where they might speedily recover. I desire to advocate private mental sanatoria for cases of supposed temporary insanity, where no patient could, on any account, remain longer than one calendar month. I think these sanatoria, or homes, would supply a want and prove an inestimable blessing, and before long become even popular, provided every care was taken to distinguish them from asylums, so that no reproach could cling to the patients or to their friends by the acceptance of the care and quiet seclusion and rest these homes would offer. I was much struck in reading an obituary notice of the late Victor Hugo, whom all France mourned, that his father died insane, and that his daughter at an early age committed suicide; and who knows, if Victor Hugo had not ridden buoyantly on the crest of the wave of success, but that he too, in the eloquent language of Macaulay, might have been afflicted with that "strange melancholy which rejoiceth exceedingly and is glad when it can find the grave." We need more sympathy for him whose thought is:

> "Oh that this too, too solid flesh would melt,
> Thaw, and resolve itself into a dew!
> Or that the Everlasting had not fix'd
> His canon 'gainst self-slaughter."

In the magnanimous philanthropy that is the custom as it is the fashion of the present age, when every man is his brother's keeper, I almost fear that I have dwelt too long on matters affecting the self-interest of the profession, but I hope I have shown that our interest is only that of the public, and trust that I have acted wisely in wandering from my first thought of symptomatology for the subject of my address; and although I should have dilated with delight and almost reverence on certain signs and symptoms that have been as pillars of light to me in my daily practice, I should have called your attention to the *stiffness in the calf of the leg* that precedes, just as the lying-in patient appears convalescent, an

attack of phlegmasia dolens—to the *dropping of the pen* in writing, and *the falling of the fork at meals*, that may appear at first almost to be accidental, but are too surely the prelude to an attack of progressive muscular atrophy—to the *peculiar sluggishness of the pupil* that ought to warn that we have a case of chronic senile glaucoma, although there may be no tension. These symptoms I have never seen noticed in text-books; and yet they are as significant as the trembling of the tongue and the ferrety eye by which we may sometimes alone diagnose typhus. But these striking facts, important as they may be, are probably known to all of you, and therefore I have preferred to frame my address on topics that are just now, perhaps, causing thought and conversation to many, and are more or less of interest to most of us.

One request, and one only, I have to make before I sit down—*i.e.*, to ask you all to take part, at least occasionally, in the discussions of the ensuing session. An old author, Thomas Fuller, once said, "There is much concealed strength in men's memories that they take no notice of." One of our distinguished members once gave me as a reason why he never took part in our discussions, that if he waited long enough he always found some speaker said just what he was thinking of speaking; but I doubt if it was always what he would have said, and I further doubt if it was always as well said; for my friend is a man of learning, a man whose experience is only equalled by his exceeding modesty. Here I would fain remind him of a familiar line in his Virgil the next time that he feels inclined to speak, "Jam tempus agi res," and I hope he will soon become of the opinion of the late Charles Kingsley, that of sitting, as of all other carnal pleasures, comes satiety, and that his voice will soon be heard at our meetings.

I shall be glad if any suggestions that I have made to-night should prove acceptable even for your thought, but how much more if, after consideration, any of my propositions might become practicable and useful to the profession. I do think by "direct medical representation" we have our welfare more in our own hands than we have ever had. We only need a little more concerted action to extract the good from the vantage-point that we have at last reached. Few of us will, or can expect to, become rich, fewer still will be able to accumulate by their practice the fortune of even Dandridge, the old apothecary, the *protégé* of Radcliffe, who we learn from Dr. Monk, in his pages of the "Gold-Headed Cane," died

worth £50,000. If we of to-day have lost the patronage of the physician, we are more than compensated by the satisfaction that our borders are enlarged, our sphere of usefulness extended; we have more right than formerly even to the somewhat egotistical motto of the Apothecaries' Society, "*Opiferque per orbem dicor;*" and although by the necessity of our profession we must know something of that sorrowful sympathy that sickens when doomed to witness agony that it cannot relieve—and if the ancient Greeks were right in their estimation of happiness, whose most enlightened wise men conceived that true happiness might ever be found in the recollection of good done to others—we of all men may expect to be happy, and have, too, the better chance of Ruskin's most cheering belief that each of us as we tread the way of life has the opportunity according to our working of turning all the voices of Nature into one song of rejoicing.

With the warmest appreciation of your kind attention to this rather discursive address I close, heartily assuring you I will spare no effort to promote the continued and almost unparalleled success of the West London Medico-Chirurgical Society, for, *ab imo pectore*, "I magnify my office."

Ordinary Meeting, Friday, November 6th, 1886, Dr. Alderson, President, in the chair.

Dr. Owles read a paper on

A CASE OF EPITHELIOMA OF THE ŒSOPHAGUS AND STOMACH,

of which the following is an abstract:

Mrs. L., was first seen by me in February, 1884. She was low in stature and small in limb, was a widow in her 53rd year (had one child, æt. nineteen). She had enjoyed good health up to the time of twelve months previously to being seen. She then began to have difficulty in swallowing her food, and from the symptoms she exhibited I arrived at the conclusion that the œsophagus was probably the seat of malignant disease, in which opinion I was supported by Dr. Habershon, who saw the case in consultation. On November 5th I passed a gum elastic œsophageal bougie, No. 3, a short distance beyond the cricoid cartilage, further than which it would not go without the exercise of more force than would have been justifiable. Upon withdrawing it there was a little

blood at the tip. The dysphagia was increased for the next two days, and in consequence of this the patient refused to have another bougie passed. After some days, however, the discomfort subsided and deglutition became easier. Previous to this—that is for several months—the disease had made but little progress, and temporary relief had followed the use of the various ordinary remedies, such as bismuth, hydrocyanic acid, creasote and others. Examination of the ejecta under the microscope showed the presence of a great deal of squamous epithelium ; the ejecta consisted of undigested food with a large quantity of glairy mucus, probably chiefly saliva which had collected in the œsophagus. One enlarged gland over the left breast was detected about this time. In the end of February, 1885, the patient suffered from acute pain in the gastric region. A careful examination could detect no distinct swelling or tenderness, although the beginning of emaciation favoured the discovery of something abnormal ; but there was some suspicion of thickening at the œsophageal opening of the stomach, inasmuch as on careful listening the passage of fluids into the stomach was accompanied by a gurgling sound, which was unnatural. On March 10, Dr. Klein examined the ejecta, and he reported that they did not come from the stomach ; there were no sarcinæ, there was no blood, and no positive evidence under the microscope of malignant disease. For another four months the patient continued fairly well, but early in July a sudden change occurred, excessive vomiting set in, accompanied with hæmorrhage. At this time she was seen by Sir W. Gull in consultation, by whom my opinion of the case was confirmed. The patient rallied again after this, and was fairly well till October, when she became worse. At this time some disaffected ladies said that as the eminent consultants who had seen the patient were biased by me, it was better to see some other able practitioner without me. This was acted on, and the patient passed out of my hands, and the history is completed from the reports of others. She continued much as before until Christmas, 1885, and was seen once prior to that date by Sir Andrew Clark ; but early in the present year the symptoms became worse and the end seemed near. The vomiting was almost constant and abundant, the pain was excessive, necessitating the hypodermic injection of morphia in large and repeated doses, and the dysphagia was so great that for about a fortnight she was nourished entirely by enemata—a means to which she had much repugnance. Then some relief

to her symptoms suddenly ensued, and in consequence of her ability to take large quantities of nourishment, and the constant use of morphia with other things, the patient lingered till June of the present year, a period of probably quite three years from the commencement of her illness. A post-mortem was arranged, and I was present at the request of the executors, and extensive malignant disease of the lower third of the œsophagus was found, together with much glandular enlargement in the anterior mediastinum. A portion of the disease was submitted to Dr. Klein, who reported as follows: The microscopic examination of the sections shows that the mucous membrane is permeated in all its layers by clusters and streaks of epithelial cells, extending even amongst and between the bundles of non-striped muscular tissue; some of the streaks resembled tubes lined with epithelium, and their cavity filled with loosely aggregated epithelial cells. In many of the clusters cell-nests characteristic of epithelioma could be easily recognised.

In conclusion, I would draw attention to the following points, viz., the comparative rarity of œsophageal diseases, the variety of epithelium as an aid to diagnosis; the detection of only one enlarged gland in the whole course of the disease; the use of the bougie and its beneficial results; the widening or removal of the stricture in the later stages of the disease in its bearing on prognosis in such cases, and the explanation of it; the duration, probably three years, due mainly to the ability to take food, and the use of morphia; the pros and cons of gastrotomy or other operation.

In the discussion which followed the recital of this case Messrs. Lawrance and Richardson, the President, Drs. Bennett, Gloster, Pope, Spicer, Good, and Messrs. Lloyd, Fenwick, Menzies, Weiss, Dunn, Collier, and Chapman took part.

Dr. Owles, in reply, said that the patient at an early period of her illness expressed herself strenuously against submitting to any operative interference, so that he considered it futile to press the question of gastrotomy.

A second paper followed on the radical cure of hernia by injection by **Mr. Keetley**, of which a short abstract is here appended :*

Mr. Keetley showed a new syringe for the radical cure of hernia by injection, and detailed three cases, of which one

* This paper is published *in extenso* in the *British Medical Journal* for May 25, 1887.

had been completely and one partly successful, while one had been an absolute failure so far, though there was nothing to prevent its being operated on again. The completely successful case was an oblique inguinal one with a good long canal; the failure was a direct hernia with a very large aperture. Strictly speaking, there was no injection of the inguinal canal in the latter case at all. An account was also given of a new method of injecting the canal subcutaneously in such a manner as to avoid all risk of injecting the hernia itself. The hernia being reduced and the patient supine, the operator's left forefinger was passed up the inguinal canal, of course invaginating the scrotum, as high as the internal ring; the nozzle of the injecting syringe was then thrust from without inwards through the anterior boundaries of the inguinal canal, until the point of the instrument touched the tip of the finger in the canal, and of course lay in the canal itself, pointing approximately in its axis—*i.e.*, downwards and inwards; the finger being now withdrawn, the injection was made.

Mr. Fenwick congratulated Mr. Keetley upon the utility of the procedure which he had introduced, and related a case in which he had followed Mr. Keetley's method with gratifying success.

Dr. Good had had good results in two cases in which he had injected the oak-bark solution. In one case there was a bubonocele on the right side and an inguinal hernia on the left; the injection was made on both sides, and six months afterwards the patient was walking about without a truss.

Dr. Gloster made a suggestion by which he thought an inconvenience mentioned by Mr. Keetley might be avoided.

Mr. Keetley, in reply, said that he would give Dr. Gloster's suggestion a trial.

Dr. Scanes Spicer showed a case of pigmentary retinitis, cyst of the neck, and lupus.

Mr. R. F. Benham showed a calculus passed *per urethram* by a child, æt. three.

Mr. H. Percy Dunn showed the following pathological specimens: The liver of a child showing extensive indentation upon the surface, the result of pressure of rickety ribs; the brain from a case of cerebral hæmorrhage; carcinoma of the œsophagus, showing the effects of the extension of the disease.

Dr. Owles showed microscopical sections of epithelioma from his own case.

Ordinary Meeting, Friday, Dec. 3rd, 1886, Dr. Alderson, President, in the chair.

Mr. W. T. Whitmore read a paper on

THE TREATMENT OF STRICTURE OF THE RECTUM BY ELECTROLYSIS.

MR. PRESIDENT AND GENTLEMEN,—The subject of Stricture of the Rectum may be considered one of the most interesting in surgery, not only from the extreme insidiousness of its commencement, but on account of the severity of the symptoms during its course, and, if neglected, its fatal termination. I propose to speak of the fibrous stricture only this evening, with and without complications, omitting the malignant varieties and constrictions due to tumours, either within or without the bowel. I have, however, been fortunate enough to bring before your notice a case of malignant disease, the history of which is so interesting and instructive that, without discussing the affection, I think it may be shown with the others. There is no trouble that illustrates so markedly individual tendency to disease as stricture of the rectum, some persons requiring but a small amount of provocation to develop it, whilst others escape in spite of almost culpable neglect. Women are much more prone to the disease than men, from the irritation that from time to time is set up in the neighbourhood of the part. Syphilides, both men and women, are also very subject to it. By far the most frequent complication of stricture is ulceration. For instance, a small ulcer is enough to set up a sufficient amount of irritation in some cases to *cause* stricture, the original ulcer meantime disappearing by treatment before the fibrous deposit has taken place. On the other hand, irritation may be set up from other causes than ulceration sufficient to induce stricture, and then ulceration may supervene as an *effect* of the stricture. Or it may so happen that when ulceration is a cause of stricture, and it is not cured, it may run on with the stricture, when ulceration may be considered both the cause and the effect of stricture.

The earlier a stricture of the rectum is discovered, the more amenable it is to treatment. In fact, I would here call your attention to a state of the parts before even stricture has commenced, and which, if judiciously treated, may save a patient

years of daily trouble and distressing pain. Thus, then, given an adult complaining of a group of symptoms such as excessive straining, lumpy motions, and an unusual desire to evacuate the contents of his rectum, or, in other words, should he describe an irritable condition of his rectum, together with general malaise, a local examination should be made before prescribing, which may be done in one of three ways; that is, either digitally, ocularly, or by bougies of various shapes and lengths. The finger is by far the best means of making an ordinary exploration, the extremity of the part generally being reached, if necessary, by letting the patient stand up and bear down. As a rule, the speculum is not of much value over the finger, unless the patient be under an anæsthetic, so that a full-sized instrument can be introduced. Under any circumstances too much caution cannot be taken in the introduction of a bougie, especially *after* it has passed the constriction at any point. Should anything be found on examination to account for the symptoms I have just enumerated, they usually answer to treatment at this period, and the comfort afforded the patient is such that in all probability he is misled as to the importance of his trouble: his appetite improves, his sleep is more restful and beneficial, and his motions are passed in every way more satisfactorily; the action of the bowels also is more easily regulated, and the symptoms which I have classed under the head of an irritable rectum subside. On the other hand, but by no means in every case, should such a state of things be neglected, we have, in addition to the troubles already mentioned, marked diagnostic symptoms indicative of stricture of the rectum. Thus the dyspepsia is more decided, obstinate constipation, alternating with profuse diarrhœa, especially happening in the morning, and to such an extent, sometimes, that it may even be treated as simply diarrhœa. The solid part of the fæces also is much reduced in size, usually becoming flattened. On straining at stool, occasionally nothing but a quantity of clear glairy fluid, resembling the white of an uncooked egg, will be voided. These collective symptoms, with perhaps irritation of the bladder, anus, or uterus, or flying pains in the sacrum and down the thighs—take these symptoms together, and there is no doubt as to the trouble that the patient is affected with, although individually they are none of them worth much for diagnostic purposes. The symptoms of incipient stricture are well illustrated in a case here this evening; it is that of:

Case I.—E. B., æt. 41, married sixteen years. Has two children, aged fifteen and eleven respectively. Has not had

any miscarriages. Last labour was much prolonged. Has always suffered from obstinate constipation. Has had prolapsus for eleven years, which has become worse and worse, the bleeding increasing to a serious extent. In 1881 she had an ischio-rectal abscess, from which a fistula resulted. In May, 1885, assisted by my colleague, I operated for prolapsus. The patient was deplorably out of condition, both constitutionally and locally; so much so that I delayed interference with the fistula, the external orifice of which was two inches from the anus. On trying to dilate the anus, the parts were most friable, and would have easily broken down had the least force been used. The greatest care had to be exercised on tying the piles, lest the silk should have cut through the part. As might be imagined, hæmorrhage took place the same night in spite of all precautions, which was controlled by plugging. The fistula was cut later on, and the patient discharged in seven weeks, cured, having gained considerably in weight. In October, 1885, she complained of all the signs of commencing stricture, and on examination we find about an inch and a half from the anus a commencing fibrous band, which is greatly exaggerated by spasm. Should this case be neglected, the stricture would become tighter and tighter, assuming an annular or tubular form, other varieties being crescentic, perforated or not, or, very rarely, a simple band stretching across the rectum. The affection being still further neglected, a state of things arises well illustrated by the following case, the history of which I now give you:

Case II., commencing August 3rd, 1886.—A. M., æt. 43, widow, by occupation a nurse, with much hard work, complains of inability to pass her motions or to introduce the ordinary bone nozzle of her Higginson's syringe, also a rectal discharge. Has been taking half a teaspoonful of sulphate of magnesia every night for the last eighteen months; has also used an enema every day for the last sixteen months, not with the idea of inducing a motion, but simply for the relief of a severe bearing down. She has also suffered from sickness three or four times a day, giddiness, severe dyspepsia, and great weakness. She has also made a point of straining at the w.c. on every opportunity, as many as a dozen times a day. Goes to bed early, but is invariably disturbed about three in the morning. These symptoms have gradually increased till the present time. She has had two children. The elder is twenty-three and quite healthy; the younger, who is dead, would now be eighteen. Both confinements were normal.

Shortly before she became pregnant for the second time, her husband, as far as can be made out from the symptoms described and from the mode of treatment adopted, communicated some form of vaginitis. After the birth of the second child, February, 1869, her symptoms of irritable rectum commenced. These, however, can only be taken supposititiously, as she admits she forgets a good deal, but she dates all her rectal mischief from about this period. In 1876 she laid up in bed with muscular rheumatism. In January, 1877, had small-pox, and in June the same year had typhoid fever, peritonitis complicating a relapse. During her convalescence the difficulty in passing her motions had greatly increased. On examination, one found that the anus was almost closed, a No. 18 French-sized urethral bougie being obstructed on entrance. There was not anything unusual in the appearance of the nates or anus. This case very well illustrates the course of the disease without complications, in spite of the severe illnesses during her history, for when she came to me she was in immediate danger of obstruction.

The next case (*No. III.*) demonstrates that which more usually happens. J. D., æt. 48, journeyman tailor, contracted syphilis fifteen or sixteen years ago. Took mercurial treatment for twelve months. In 1875 he was attended at a Metropolitan hospital for ischio-rectal abscess. Coming into my hands at the St. George's and St. James's Dispensary, I found him suffering from fistula of a severe description. I sent him to St. Mark's Hospital, where he was operated on for fistula, and remained there as an in-patient for nine weeks. He came out with the wound open, and returned to work earlier than he was advised to do by the surgeon in charge. In about thirteen or fourteen months he returned to St. Mark's and was re-admitted. He was put to bed, and had a small quantity of fluid injected into his rectum every night by means of a glass syringe, and took cod-liver oil ; in fact, was probably treated for ulceration. After seven or eight weeks was discharged as an out-patient. In 1884, or nine years after I first saw him, he again came under my care in a very bad way indeed, complaining of great pain and difficulty in passing his motions, with constant copious discharges of a bloody description. He was sleepless, dyspeptic, and very much emaciated. Locally, it was easy to see the severe nature of the operation he had undergone in 1876, with consequent unavoidable contraction. There were two small complete sinuses, which were easily divided. Stricture from cicatricial tissue

at the anus was clear, and fibrous stricture, a little higher up, was diagnosed from the history of the case. He received an anti-syphilitic treatment, and bougies were introduced, commencing with a No. 1.* This may be taken as a typical case of stricture of the rectum with complications. If still further neglected, it would have gone from bad to worse, abscesses forming and pointing, it might be, into the ischio-rectal fossa, the urethra, or peritoneum, leading ultimately to death from peritonitis or exhaustion. Here also we have a complication of things developing the patient's tendency to stricture. In the first instance, the primary cause I take to be general loss of tone to the system (as might be supposed in a journeyman tailor, who, moreover, admits his irregular living about that time); next, the formation of the ischio-rectal abscess and fistula—the latter being of a bad character, necessitating severe operative measures; then the wound taking on an ulcerative process was sufficient to cause stricture even in a non-syphilitic man.

Having given you the history of the cases I have produced, and having particularly drawn your attention to the state of the rectum previous to anything like fibrous deposit taking place, I am now anxious to explain the mode of treatment I have adopted, on account of the relief it has afforded. You may remember that I reported the history of Case No. III. up to the commencement of June. At this time his condition was once more most critical. He was certainly passing his No. 4 bougie, but it gave him great pain, and his troubles were much worse did he miss a day. His groans at stool were sufficient to alarm the whole house. In fact, he was a little worse than when he consulted me in August, 1884. He required absolute rest in bed on account of the inflammatory symptoms, to enable him even to continue the passing of the bougie, let alone any idea of curative proceedings. It was about this date that—my friend and colleague, Dr. Steavenson, and Mr. Clarke, having published the results of their electrolytic treatment of stricture of the urethra—my friend Dr. Julius Althaus (who was the first to demonstrate the changes which take place in the animal tissues during electrolysis, and the first to apply the method in this country to the treatment of disease, more especially tumours) suggested that the same process might be adopted in stricture of the rectum. I there-

* This mode of treatment was adopted from August, 1884, till commencement of June, 1886, and the size of the bougie could only be increased from No. 2 to No. 4.

fore submitted Case No. III. to the demonstrations of Dr. Althaus. A current of fifteen milliampères was completed for fifteen minutes at the first sitting, and repeated in a week's time, the bougie being daily continued. The improvement was marked after the first application. Electrolysis was continued from week to week, and the daily passing of the bougie, No. 4 size, was discontinued after the third week. At the end of seven weeks I continued the treatment almost from day to day, from fifteen, twenty, to thirty minutes, varying the strength to suit the patient's susceptibilities. The syphilitic treatment was discontinued on June 29th, 1886. At the end of August the discharge was very thin, without any blood or pus. The patient slept better, ate and digested his food well, and was gaining weight. He had nearly lost all straining at stool, and had but little pain even on passing a hard motion, which was frequently the case. During the whole of September no instrument of any kind was used ; but at the commencement of October he allowed his No. 4 bougie to remain in for twenty minutes, with very bad results, as it induced pain and an increase of the discharge, with much bearing down. When these untoward symptoms had disappeared, I was glad to find that contraction had not taken place, an electrode equal in size to a No. 6 rectal bougie passing with ease, this being the same size as the one used at the end of August. I am now using a No. 8 electrode, No. 7 having passed.

The stricture I consider by no means cured, but the great relief that was afforded him when he was in such a critical condition, without his being laid up for a day, and the circumstances of the severe inflammatory symptoms subsiding, and of his being also able to continue his work, have encouraged me to lay his case before you.

Case II. I have treated by means of electrolysis, and from the first application relief was afforded. This patient was also left to herself during September, when no contraction took place. I am now using an electrode equal to No. 9 rectal bougie, having commenced with one on August 3rd equal to a No. 18 French-size urethral bougie. She has not been laid up for a day. In neither case have I troubled you with the days' duration of the application, or the strength of the current employed—these being determined by mutual convenience, and by symptoms as they arose ; but, on an average, the current was passed every third day, each application lasting about fifteen minutes, and the strength twenty milliampères. I am inclined to think, however, that a week ought to elapse at least between each

sitting, and I shall adopt that course in future. From the results I have obtained on these two most severe and chronic cases, I am most sanguine as to the employment of electrolysis in stricture of the rectum, especially as it entails no cutting, no laying up, no loss of blood, and is absolutely painless. The process is extremely simple, really safe, and within the reach of every surgeon. I have reason to believe that I shall be able to watch the cases, and at a future date I hope to have the opportunity of further reporting on them.

After some remarks on the paper from the *President* and *Dr. Thudichum*,

Mr. Edwards said that he had tried electrolysis in two cases of stricture of the rectum. One case was that of a man in whom troublesome contraction followed the removal of the lower part of the rectum. When the patient left the hospital dilatation was being kept up by the use of bougies. After his re-admission, however, Mr. Edwards incised the stricture dorsally; recontraction again occurred, and subsequently the electrode was tried, and benefit has followed. In cases of stricture of the urethra, of which Mr. Edwards had treated upwards of forty by electrolysis, excellent results had so far followed, but sufficient time had as yet scarcely elapsed to enable him to speak definitely as to the permanence of the cure.

Mr. Cripps, as a visitor, remarked upon the pathology of the disease, and drew attention to the rarity of the affection in men in comparison with its occurrence in women. He said that of 100 cases of rectal stricture admitted into St. Bartholomew's Hospital, ninety-five were in women and only five in men. With regard to women, there seemed to be a close connection between child-bearing and the disease. The history generally was that, the patient having been previously well, a difficult confinement gave rise to pelvic cellulitis. This caused the contraction of that portion of the pelvic fascia which runs round the rectum, by which a 'kink' in the gut was produced, which subsequently became the starting-point of fibrous stricture.

Mr. Reeves agreed with Mr. Cripps in the main with regard to his remarks about pelvic cellulitis, but this did not explain those cases of rectal stricture which occurred in single women. In the simple forms of stricture of the rectum he thought digital dilatation was the best treatment.

Mr. Benton made some remarks, and

Dr. Althaus said that he had listened with much interest to

the paper, and believed that these were the first cases that had been recorded in which electrolysis had been used in the treatment of stricture of the rectum. From a large number of experiments and observations he had concluded that the effect of electrolysis upon the tissues was to cause chemical decomposition to take place, alkalies being attracted to the negative pole. This was a very material point to bear in mind in these cases, since by this means subsequent contraction was obviated.

Mr. Whitmore replied, and laid emphasis upon the fact that his paper only dealt with the electrolytic treatment of fibrous strictures. With regard to the occurrence of stricture of the rectum in single women, it was certain that chronic constipation was quite sufficient to set up irritation and stricture.

A CASE OF INVERSION OF THE UTERUS, DURING PARTURITION, TREATED AS A POLYPUS AND LIGATURED.

Dr. Albert Venn read a paper under this title, which was followed by a short discussion, in which the *President*, *Dr. Travers* and *Dr. Thudichum* took part.

CASES, WITH REMARKS, IN GYNÆCOLOGICAL AND ORTHOPÆDIC SURGERY.

Mr. Reeves read a paper upon this subject, and the *President*, *Dr. Owles*, *Dr. Campbell Pope* and *Mr. Keetley* took part in the discussion which followed.

LIVING SPECIMENS.

Mr. Whitmore: Cases of stricture of the rectum treated by electrolysis. — *Mr. Edwards:* A case of excision of the rectum.—*Dr. Savill:* A case of ichthyosis sebacei, melanoderma, and tubercular syphilide.

CARD SPECIMENS.

Dr. Savill: Gumma of a Liver found in the Body of a woman, æt. 72, who died of Morbus Cordis ; Kidneys of Acute Nephritis.—*Mr. Alfred Cooper:* Carcinoma of the Rectum.—*Mr. Edwards:* Carcinoma of the Rectum.—*Mr. Alderton:* Vertical Rupture of Aorta.—*Mr. Lunn:* Right and Left

Kidney with the Bladder of a Man, æt. 54; a small calculus completely blocks the left ureter; death occurred from the effects of an old urethral stricture of twenty years' standing.—*Mr. H. Percy Dunn:* A Hernial Sac and Contents Removed during Life; Pulpy Degeneration of the Elbow Joint.

Ordinary Meeting, Friday, January 7th, 1887. Dr. Alderson, President, in the chair.

This evening was mainly devoted to the subject of Phthisis and its treatment.

Dr. Blenkinsop read a paper on

PHTHISIS.

Adopting the term tubercular phthisis as being most suggestive of the changes wrought in the lungs by matter originating in a specific virus, the author proceeded to review the earlier and later theories advanced regarding tubercle. These theories were shown to be variously expressive of the pneumonic, or the parasitic origin of the latter; the most recent, that of Koch, of Berlin, being now almost universally regarded with the greatest favour. The etiology of tubercular phthisis was attributed to three circumstances: (1) to heredity, or transmission through the offspring; (2) to transmission from an infected husband to a wife, through coition; and (3) to infection through the atmosphere, or from milk.

In the first two instances certain external conditions were necessarily more or less requisite to excite and develop the readily awakened energies of the subtle organism with which the constitution was infected; whilst in the last, the result of similarly unfavourable conditions, to start with, afforded a fitting soil for the reception of the specific germ found so abundantly in overcrowded and insanitary localities. Some constitutions appeared to be so saturated with the virus through hereditary or conjugal infection as to exhibit serious symptoms upon the operation of the slightest external causes, or even as it were spontaneously, in spite of every precaution.

Many observers entirely ignored all ideas of heredity, and believed in atmospheric infection alone, but they were, at the same time, often sorely at a loss to explain, on their own theory, the occurrence of many awkward facts brought to their notice. Hereditary predisposition is not always readily detected, though the author himself regards certain external appearances and general conditions of health in a given class of patients as strongly indicating a *specific* constitutional taint, or, to say the very least, a predisposition sufficing to characterize the subsequent disease as hereditary.

An explanation was next afforded of the probable reasons of phthisis—regarded as an hereditary disease—passing over a generation, appearing at various periods of life, or alighting as it were capriciously upon one only of a kindred—and the opinions of authorities quoted :

" With the evolution and multiplication within the organism of a specific morbid matter"—in the words of the late Dr. William Budd—there is also found to be " a universal tendency to the elimination and casting forth of the same ;" the caseous products invariably undergoing retrogressive change, resulting most frequently in softening.

Various symptoms diagnostic of incipient phthisis were then referred to, and special attention directed to this stage of the malady, which was so frequently overlooked, cases being alluded to of the sad consequences arising out of too hasty an opinion or neglect of symptoms of an apparently insignificant character. One advantage afforded by the hereditary aspect of the question was that it admitted, in the first instance, of preventive measures, both in the case of the general health and the avoidance, as far as possible, of all causes likely to foster the morbid tendency. The best method of promoting these ends was briefly referred to. The same attention to the physical condition of the community at large, with improved sanitary conditions of every description, in overcrowded neighbourhoods, naturally tended to a lessened risk of infection from without. When the disease has once manifested itself, efforts have to be directed to the elimination of the fatal germ, as well as to the repair of the affected lungs and the improvement of the patient's health. To this end inhalation of medicated vapours should be persistently had recourse to, aided by counter-irritation ; and the system be thoroughly supported by constitutional treatment and nourishment. How far the first-named method may prove useful in the incipient stage it is at present difficult to

determine. When softening, however, has begun, it is of much value when a suitable apparatus is employed, such, for instance, as one recently introduced by the author.* Many inhalants at present in use have undoubtedly proved most efficacious in their action upon the lungs, but there are probably others yet to be discovered which will more effectually eradicate the subtle organisms which prove so fatal to thousands.

Dr. Seymour Taylor read a paper on

THE ETIOLOGY OF PHTHISIS, AND ITS TREATMENT FROM A HYGIENIC STANDPOINT.

Phthisis he considered a condition or symptom having several causations: inflammatory, fibrous, tubercular, or otherwise. The tubercular form might be described as bacillus phthisis, or, owing to Koch's connection with the tubercle bacillus, the disease might be called Koch's phthisis. In his experience the bacillus tuberculosis was always present in tubercular phthisis. Tuberculosis, like cancer, may vary in its virulence; in some it may be general in its distribution; or it may be quite a local process. Tubercle is not singular in its behaviour; it attacks some localities by preference. It selects certain families or constitutions, apparently by preference and not by accident. The author then discussed the arguments which had been advanced against the infective theory of tuberculosis, and said that other factors were necessary for a man to catch the disease than the mere contact of the bacillus; while whatever the gate of infection might be—mucous membrane or otherwise—an abnormal condition of the points of contact was a certain factor in the production of the disease. The blood contained bacilli after inoculation, and as in enteric fever a relapse may be occasioned by re-inoculation from an infected patch of ulceration, so it may be the case that extension occurs from a tubercular ulcer on the tonsil, or buccal cavity, or from strumous glands containing bacilli; indeed, it is possible by inhalation to account for the multiple tubercular lesions which are met with in the lungs. The author then sketched briefly the life-history of a tubercular patch, and discussed the origin of giant cells. He concluded by epitomising the causes which in his opinion rendered phthisis so virulent amongst us, and said that our cold, damp climate,

* *Lancet*, March 27, 1886.

by favouring the prevalence of catarrh of the respiratory apparatus, was directly responsible for a condition which allowed the tubercular parasite to flourish.

Mr. Bruce Clarke read a paper on

THE OPERATIVE TREATMENT OF INTERCURRENT DISEASE IN TUBERCULAR PATIENTS.

After briefly discussing the nature of tuberculosis and its dependency on a specific bacillus, the author proceeded to show that it was almost impossible to remove by a surgical operation the whole of the bacilli that had found their way into the body. The local manifestation was all that could be got at. It was clear, therefore, that an operation could only aim at removing a growth which was causing so much constitutional disturbance as to prevent the recuperative powers of the patient and the physician's remedies from exercising a due influence on the course of the intercurrent disease. After relating several cases of his own and of other surgeons, in which such operative treatment had been practised with a greater or less measure of success, and after showing that such cases healed with success and ease, the author concluded by asserting that surgical interference was only justifiable when all attempts at cure without the knife had been tried and found wanting.

Dr. Thorowgood in the course of some remarks said that a depressed state of the nervous system was an important factor in the causation of phthisis.

The *President* said that a dry soil was an important preventive of phthisis. In the second decade men were much more prone to the disease than women.

Mr. Keetley and *Brigade-Surgeon Curran* made some remarks, and *Dr. Thudichum* observed that there was no climate in the world which was free from phthisis. He thought the Koumiss cure, advocated by the Russians, was of no real use. It was remarkable that since Koch's discovery of the bacillus, phthisis had increased all over the world.

Messrs. H. H. Taylor, *Lloyd*, *Benham*, and *Dunn* continued the discussion, and *Drs. Seymour Taylor*, *Blenkinsop*, and *Mr. Bruce Clarke* respectively replied.

Dr. P. S. Abraham showed a selection of sections of tubercular organs in man and the lower animals, and specimens of the tubercle bacillus.

Messrs. Wright and Co., of New Bond Street, exhibited a large collection of instruments, including sprays and inhalers.

Ordinary Meeting, Friday, February 4th, 1887. Dr. Alderson, President, in the chair.

LIVING SPECIMENS.

Mr. Keetley showed: (1) A case of cholecystotomy; (2) A case of arterio-venous aneurism of the cavernous sinus after treatment by compression.

Dr. Thudichum read a paper on

THE NATURE AND TREATMENT OF HYPERTROPHIES AND TUMOURS OF THE NASAL AND PHARYNGEAL CAVITIES.

He related a number of cases of hypertrophy of one or other, or both lower turbinated bones, causing respiratory inadequacy and its consequences to lungs, nerves, and constitution. He showed how it led to malformations of the septum, and to its ulceration, perforation, and loss. He showed how these cases had been cured by the abscission of parts of the lower conchæ. He also related cases of hypertrophy, and of abscesses in the middle concha, and in the ethmoid cells, and how they had been cured by the ablation, either of the entire conchæ, or of a portion of the cells. He further gave an instance of the simultaneous or independent ablation of excrescences of the septum, all of which had yielded satisfactory results. He objected to surface cauterisation of the nose, and gave cases illustrating its results. In one case, that of an officer, surface-burning in 27 sittings had produced severe asthmatic attacks, which only yielded after the ablation of the concha. He referred to the great variety of nervous symptoms connected with nasal hypertrophies, and to their disappearance after ablation of the hypertrophied parts, and put it as a general fact, that in cases of chronic hypertrophy of any of the four, respectively six or eight, turbinated bodies, causing obstruction or accompanying neurosis, ablation was indicated, and was in most cases the only means of effecting a cure. He gave several instances in which members of our

profession had not only introduced and accompanied patients who had been so restored to health, but had themselves undergone such operation with results highly satisfactory to themselves. He showed how this refuted the observation which in the course of 1886 had been made in a medical journal, in which it was reported that a conclave of specialists at Brighton had declared such operations to be either unnecessary or unjustifiable, and had termed their result a mutilation. He maintained that these observations were not based upon any experience. The mutilation consisted in the existence of disabling disease, and its removal was the only cure. He believed that the profession would not place the slightest confidence in such imaginary objections. He alluded to a lecture by Dr. McBride, of Edinburgh, on nasal reflex neurosis, and showed that the literary quotation then given began only with 1881, while he, Dr. Thudichum, had taught the whole subject of reflex neurosis, from nasal disease, particularly asthma, hay fever, hemiopsia, convulsive twitchings, spasm of pylorus, perverted sense of smell, vertigo, loss of consciousness, cough and spasmodic sneezing, ever since 1875. He showed that both nose disease and neurosis or nerve complaint have a common dyscratic origin, and can be cured fundamentally only by the combination of operative and general treatment, and not by either alone. He further showed that without such a constitutional basis the more serious reflexes, except sneezing, were never produced. He denied that the nose contained erectile tissue, or an erectile apparatus, and maintained that the word erectile was inappropriate to the parts of the conchæ provided with a multiplicity of venous sinuses. He maintained the superiority of the electro-cautery to all other operative procedures, and quoted cases as proofs. One had been two and a half years under forceps treatment in several hospitals in succession, but had been cured by electricity in two sittings. Another case was found to have two inches of steel wire fixed in his nasal cavity, being the residue of a broken snare unsuccessfully used eight months before. He also described the advantages of the use of cocaine, and the disadvantages of the use of general anæsthesia in these cases. He concluded with a novelty, namely, the proof of the permeability of the incisive canal, and showed that great attention must be given to all the foramina of the cavities adjacent to the nasal cavity, of which foramina there were no less than sixteen. The cases were illustrated by sketches on the blackboard.

Mr. Spencer Watson asked for further information with regard to the removal of the spongy bones with the actual cautery, and whether the platinum cautery would pass through the bone?

Dr. Clippingdale did not agree that asthma was a neurosis dependent upon obstruction of the nose by polypi.

Dr. Ball said that there were many cases of chronic hypertrophic rhinitis which were curable without involving the removal of the spongy bone.

Mr. Collier asked if general anæsthesia was used by Dr. Thudichum in his cases?

Dr. Bennett would like to know whether there were any marked signs of syphilis in Dr. Thudichum's cases?

Dr. Newton Pitt asked Dr. Thudichum if he had found any bacilli in any of his cases which he had described as tubercular?

Mr. Lloyd inquired if hæmorrhage had ever proved troublesome after the operation?

After some interesting remarks from the President, *Dr. Thudichum*, in reply, described in detail his method of removing the inferior turbinated bone with the electro-cautery.

TWO CASES OF MULTIPLE NEURITIS AFTER DIPHTHERIA AND OF FACIAL HEMIATROPHY.

Dr. Campbell Pope read notes of two cases under this title, each of which was contributed by Dr. C. W. Suckling.

Case 1 was that of a woman, æt. 42, in whom the disease commenced when she was about eighteen years of age. Left side of face markedly smaller than right. Bones much atrophied. The horizontal ramus of the lower jaw is one inch shorter on the left than on the right, and much diminished in thickness. The malar bone is also much atrophied. The fat is quite gone, the left eye being sunken and well-marked fossæ being present above and below the zygoma. The skin is not altered in colour, but the eyelashes are scanty, and there is complete alopecia over the left half of the front of the skull. This was concealed by her at the time she was photographed. The temperature is a degree higher on the left side; sensation is unaffected. Two well-marked grooves are present on the left side of the forehead, due to atrophy of the face in the situation of the supra-orbital nerves. The general health is unaffected. The tongue, soft and hard palate are normal, and there is no atrophy elsewhere. The faradic response is much increased on the left side, evidently owing to

diminished resistance of the skin. No cause can be assigned, but she had toothache a great deal when younger, and she thinks her face has got worse after her confinements. No syphilitic history.

MULTIPLE NEURITIS AFTER DIPHTHERIA.

Case 2.—A young man was admitted into the Queen's Hospital, Birmingham, three months ago, with almost complete paralysis, which had commenced in his legs, and later on had affected the forearms. Ten weeks previously he had had a sore throat, his sister living in the same house died of diphtheria, and his larynx was anæsthetic on admission. There were well-marked dropping of the hands and feet, emaciation, marked tenderness in the calf muscles, and along the nerve trunks. He suffered from shooting pains in the legs before admission. A prick of a pin caused two sensations, touch being first perceived and pain after. There was also some analgesia. The reaction of degeneration was present in the extensor muscles of the legs and forearms. He is now improving gradually, taking forty minims of the liquor strychniæ three times daily, and being galvanised and rubbed. Faradic response has returned in the thenar and hypo-thenar muscles, and in both forearms.

An interesting discussion followed, in which the *President*, *Dr. Bennett*, *Mr. Mallan*, *Dr. Pitt* and *Dr. Blenkinsop* took part, and *Dr. Pope* replied.

CARD SPECIMENS.

The following were shown by **Mr. H. Percy Dunn**: (1) Extensive rupture of the duodenum, following a kick from a horse; (2) Tuberculosis of the spleen from a child of three months; (3) Sarcoma of the testis; (4) Large intussusception from a child.

Dr. Abraham, some microscopical sections of sponge grafts.

Ordinary Meeting, Friday, March 4th, 1887. Dr. Alderson, President, in the chair.

His Excellency Dr. Duncan, Member of the Russian Privy Council, Surgeon-General to the St. Petersburg Police, was elected an Honorary Member.

Dr. Scanes Spicer showed a series of cases of laryngeal and post-nasal disease.

Dr. J. B. Ball read a paper on

THE NOCTURNAL INCONTINENCE OF URINE IN CHILDREN.

I have for some time past been noting particulars of cases of nocturnal incontinence of urine in children, and it seemed to me that my own further inquiries would be facilitated by eliciting the experience and opinions of others in this Society; and it is with this view, rather than with the hope of throwing fresh light on the subject, that I venture to read the following remarks:

Under the head of "Nocturnal Incontinence," I confine myself to the common disorder of the functions of the bladder in children, owing to which they wet the bed during sleep more or less constantly, and which is often attended with troubles of micturition while awake, and is not associated with gross disease in the bladder, such as stone, cystitis, tubercular disease, etc. To have a clear idea of the nature of this trouble, one should consider the essential points in the mechanism of bladder action in the normal condition. This action is best explained by assuming that the motor centre for the bladder, in the lumbar part of the spinal cord, consists of two parts, viz., a centre maintaining the action of the sphincter, and one exciting the action of the detrusor. These two parts of the motor centre are antagonistic to each other. When one acts the other is inhibited. In normal *rest* the sphincter centre is active, the detrusor centre is inhibited. In like manner, in *action* the detrusor centre is active, the sphincter centre is inhibited. How is action produced? The activity of the spinal centre is controlled by a higher centre, so that we may suppose a cerebral centre. The usual source of action is a *voluntary impulse* from the brain to the spinal centre, which voluntary impulse may, or may not, be evoked by the sensation of a full bladder. The motor centre of the bladder is also influenced *reflexly* by messages conveyed to it from the sensory nerves of the bladder and urethra, as from a distended bladder. When the pressure in the bladder is increased beyond a certain point, an afferent impulse reaches both the brain and the spinal centre. The tendency to reflex action, on the part of the spinal centre, is held in check by the cerebral centre. When the controlling influence of the brain, however, is withdrawn by the will, reflex contraction of the detrusor takes place, with inhibition of the

sphincter, and so the bladder is emptied. It is important to note that the motor centre in the spinal cord is influenced reflexly, not only through the nerves from the bladder, but through the peripheral sensory nerves, such as those of the perinæum, and lower end of the rectum. Thus in a dog where section of the spinal cord above the lumbar enlargement had caused retention, a cold wet sponge applied to the perinæum caused it to urinate. It is a common experience that washing the hands in cold water tends to excite bladder action.

During sleep the bladder centre is at rest, that is, with sphincter centre active, detrusor centre inhibited, and is so maintained by the control of the higher centre. Even the powerful influence of a distended bladder will not evoke action without awaking the person from sleep. We have only, however, to imagine a *more excitable condition of the spinal centre*, perhaps due to defective control of the higher centre, and we get a state in which the bladder over-easily responds to the reflex stimulus of distension, with consequent evacuation of urine during sleep; in fact, a *too easily excited reflex micturition*. Such a state is not uncommon in children, and constitutes the malady now under consideration. In slighter degrees it may only amount to an *occasional* evacuation of an over-full bladder during sleep. Indeed, this is an accident which happens occasionally to most children from an over-readiness to respond to reflex excitation, common at their age. In a more marked state of irritability of the spinal centre, the bladder will be evacuated *nightly*, as soon as it is *moderately full*, some hours after going to bed; and in still more marked cases a bladder will be emptied as soon as it is only *very slightly charged*, two or three times in the night, or oftener. As might be expected when the reflex excitability of the spinal cord shows a great increase over the normal, during sleep, there are symptoms of over-readiness on the part of the bladder to respond to stimuli in the daytime, or while awake. Thus, in the majority of children with incontinence we get a history that they go oftener than other children during the day, or that there is an inability to wait, once they feel the desire to urinate. A moderately full bladder in such children is sufficient to cause a great tendency to reflex contraction, a drop of urine is forced into the urethra, and causes an irresistible desire to urinate. Thus, these children wet themselves more or less frequently during the daytime. Hyper-sensitiveness from any cause may form an element in these severe cases, but it must be remembered that no amount of irritation

of the bladder itself will be sufficient to cause nocturnal incontinence—that is, evacuation of the bladder *during sleep*. Disturbance of the normal action of the motor centres is necessary for this. What the exact condition of the motor centre is, which causes this disturbance of function, is a mere matter of conjecture. Let us look at the conditions under which it occurs. It is found to be commoner in boys than in girls. It becomes less frequent as age advances, though less importance is naturally attached to it in young children than in older ones. It becomes rarer as puberty approaches, and cases which have persisted till then generally undergo spontaneous cure. I have no doubt it is a family complaint; that is, it is apt to occur in several children of the same family. As to heredity, I have had a history in several cases of the father or mother having been subject to it in childhood, and this happened more often than could be accounted for by coincidence. In one case, the father and father's father were affected. One might expect the complaint to be more prevalent in neurotic families. The histories in my own cases, though pointing that way, do not hitherto seem to have established this. The complaint is met with in all conditions of health, though, I am sure, more frequently in thin flabby anæmic children.

With the stock statement, which is copied from book to book, that peripheral irritation about the arms and genitals, resulting from ascarides, long prepuce, adherent prepuce, and the like, is the most frequent cause of this complaint I cannot agree. It is usually said that messages from these peripheral irritations are misinterpreted by the spinal centre, and cause nocturnal incontinence; but it must be remembered that a message from a distended bladder itself does not cause evacuation of the organ during sleep, in the normal state, so that we should suppose these peripheral irritations to set up in the first place instability of the spinal centres, which, of course, it is well conceivable they may do, sometimes.

I do not believe that excessive acidity of the urine, or the passage of uric acid, is a cause of incontinence. In nearly all the chronic cases I have examined I have been struck with the fact that the urine is usually only faintly acid, or neutral. I have never known the administration of alkali, or the cutting off of animal food, do any good to the complaint.

Two points are usually insisted on in the treatment, viz., not giving the child much fluid near bedtime, and waking it up two or three times a night to pass water. Both expedients

diminish the number of accidents, and in a mild case will prevent accidents *while persisted in*. They do not cure. It is said they cure by breaking the child of the habit; but I maintain nocturnal incontinence is *never a habit*, in the proper sense of the word, and cannot therefore be cured, like other habits, by preventing repetition of the act for a certain time. Indeed, many mild cases of incontinence intermit for varying periods of days or weeks. A change from one place to another will often cause intermission. A child may get into a habit of wetting the bed while awake or partly awake, and such lazy or dirty habits may be cured by the same means as other bad habits. This remark is especially applicable to the system of rewards and punishments usually adopted by mothers, and only effectual when the child is lazy, or dirty, but is of no use in the genuine cases I am considering.

As to drugs, belladonna, by universal experience, is the most useful. Used properly, it will effect a permanent cure in most cases. Few are the cases, indeed, that will not derive some benefit from it. The few that resist it altogether there is no means of distinguishing beforehand. Therefore, it is best always to lead off with this drug. I begin with ten drops of the tincture, or the sixth of a grain of the extract, three times a day. An improvement in day troubles, if there are any, is first observed. The dose should be steadily increased till, if possible, all the symptoms disappear. Forty to fifty minims of the tincture, or three-fourths to five-sixths of a grain of the extract, three times a day may be necessary—I have found a single large dose every night serve the purpose equally well. I have increased the dose up to two and a half grains of the extract at bedtime. The dose found sufficient to keep all symptoms in abeyance must be persevered in for three or four weeks. Sometimes we are disappointed to find a relapse in a case which was apparently cured, and had remained well for many months after cessation of treatment. Renewal of treatment is necessary. How does belladonna act? The stock explanation in books is, by paralysis of detrusor of bladder. It really acts in all probability in one of two ways: either by diminishing reflex excitability of the spinal cord, or depressing the sensory nerve-endings in the bladder, and so lessening sensibility to variations of pressure within. Probably the effects are partly due to both, but I think the central action is the more important, as belladonna not only relieves but cures the affection.

Strychnia with many has most repute next to belladonna. It is far behind belladonna. I have never found any benefit

from it when prescribed alone, but in obstinate cases, in which belladonna had improved the symptoms up to a certain point, the combination with it of strychnia seemed to aid complete recovery.

Of some other drugs, such as bromide of potassium, chloral, ergot, opium, benzoic acid, etc., I shall say nothing, not having tested them to any extent, and what experience I have had not having been favourable. One drug which I am sure is worth a trial is cantharides. In a dose of one, two or three minims of the tincture, three times a day, it will sometimes prove efficacious. In two cases I had under treatment, in which belladonna and other drugs failed, tincture of cantharides in small doses effected a cure. The action is suggested to be through slightly irritating effects on the urinary passages, the irritation producing through the afferent nerves a beneficial influence on the nerve centres, or restoring the normal balance between the sphincter and detrusor. This action would be analogous to that of various methods of local treatment which have been recommended, such as the passage of a bougie from time to time, the dilatation of the urethra in female children, or the injection of solution of nitrate of silver into the prostatic part of the urethra once a week or so. These methods are favourably reported on by good observers, but certainly are not to be resorted to till simpler methods, especially a thorough trial of belladonna, have failed. Blisters to the sacrum or lumbar region I have tried occasionally, without benefit. Electricity I have had no experience of.

I will sum up briefly the line of treatment I would feel inclined to adopt, with present knowledge. I should give such directions as to diet, exercise, bathing, etc., as would be likely to promote general health. Ascarides I would treat as a matter of routine, as in any child I was attending. I should recommend interference with prepuce only if obvious malformation existed, such as adherence or phimosis. I should not expect or wait for the cure of incontinence from the foregoing, but should from the very commencement put the child on belladonna, and give it a steady and patient trial. If belladonna failed to effect a complete cure I should try the addition of strychnia. Failing these remedies, I should try cantharides. In rare cases which resisted the preceding treatment, I should be inclined to recommend one of the local methods of treatment already alluded to.

DISCUSSION.—*Dr. Travers* said that he would like to hear a more definite statement in regard to the causes of inconti-

nence in children; in his experience, belladonna was only successful in a small number of cases.

Dr. Owles fully believed in belladonna; he had found cantharides of use, and he was disappointed that no reference had been made to ergot.

Mr. Chapman had cured a case of incontinence by the removal of a tight pressure.

Dr. Pitt agreed with Dr. Ball that the cause of incontinence was a central and a peripheral one. It was not a habit; the valve centres required educating in order to overcome the difficulty. Neglected children frequently suffered from incontinence. The disorder ran in families, and in these cases the mothers were to blame. It was almost unknown after puberty.

Dr. Bennett did not think belladonna would cure all cases.

Mr. Benham had seen some cases where belladonna had acted like a charm; others where it was of no use. In one case incontinence was caused by leucorrhœa.

Mr. Mason thought that incontinence was mainly due to ascarides and a long prepuce.

Dr. Seymour Taylor referred to the anatomical differences which existed between the bladder of a child and that of an adult. He considered the cause of the incontinence was some neurosis, akin to epilepsy. The patients all come of a neurotic stock, for which bromide of potassium was a useful agent.

Dr. Scanes Spicer summarised the causes as follows: (*a*) gross nerve disease; (*b*) peripheral irritation; (*c*) habit of control never acquired over nerve centres of micturition. Hyper-excitability of the lumbar centre was present in some cases; there was also a class of patients who could be cured by threatening punishment in the form of bread and water diet.

The *President* said circumcision cured some cases, but it was not so in all, for incontinence was met with in Jewish children. Teevan's suggestion of giving a milk diet was a good one.

Dr. Ball replied.

Mr. Benham read a paper on

A CASE OF IMPACTED URETHRAL CALCULUS, FOLLOWED BY URINARY ABSCESS—PERINEAL SECTION—COMPLETE RECOVERY.

W. W., æt. 36, was just convalescing from a severe attack of double pneumonia when my attention was drawn, on

September 26 last, to the fact that his penis was much swollen, and that he was unable to micturate. He had a slight attack of gonorrhœa some eighteen years since, which lasted only for about seven days. He suddenly noticed, a few months ago, that the stream during micturition was smaller, and that the act was accompanied by a tickling sensation, culminating in pain at the root of the penis. Urine was normal. I found the prepuce swollen, the upper portion being extremely œdematous and entirely obliterating the orifice of the urethra. The glans penis was much swollen, more especially towards the left side. After many unsuccessful attempts to pass a soft catheter, about three ounces of urine dribbled away, which gave relief; but on the following day, finding that the swelling had increased, including the scrotum, which was now about twice its normal size, that the retention was complete, and that the bladder was considerably distended, and as I did not consider that there would be any advantage in aspirating the bladder, and believed that the operation of perineal section was necessary, I called Messrs. Keetley and Dunn in consultation. After the former gentleman had been unsuccessful in passing any instrument, it was resolved to lose no more time, and perineal section was forthwith performed. The median operation was chosen. There was considerable difficulty experienced in passing Syme's staff, which gave, when *in situ*, the sensation that it was in contact with some metallic substance along the side of the urethra, and on withdrawing it after the incision was made, it was found that its lower or diminished portion had been literally bent from the straight line. A soft rubber tubing was introduced through the perineal wound into the bladder and secured there, and linseed poultices kept constantly applied to the part.

On the third day from the operation, the œdema of the scrotum had somewhat subsided, but the swelling along the left side of the penis had considerably gained ground, giving a sensation to the touch of distinct fluctuation. An incision was accordingly made over the most prominent part, and about eight drachms of fœtid pus evacuated. On passing a probe into the incision it was found to go downwards into the œdematous substance of the scrotum, and upwards it communicated with the urethra. Poultices were kept constantly applied, and the cavities were frequently syringed with a weak solution of carbolic lotion, while the bladder was washed out twice daily with boracic acid lotion.

Two days later, as the swelling had diminished, we passed

a metal instrument from the perineal wound backwards along the urethra until it projected through the meatus, as no instrument could be passed in the usual way. Then by attaching the rubber catheter to the projecting metal one and withdrawing the latter, the soft catheter was pulled along the urethra and so out of the perineal wound, and then into the bladder. The rubber tube was subsequently replaced by a No. 9 gum catheter, as the former was constantly slipping out. This remained *in situ* a week, and then a No. 10 metal instrument was passed along the urethra from the meatus into the bladder, and in doing so there again appeared a sensation of its coming in contact with some hard substance, but nothing definite was made out as to the cause.

A week later, when all the swelling had disappeared, a thickening was found by the author around the urethra, just at the junction with the anterior margin of the scrotum. On passing a probe it came in contact with a hard substance, which was broken into pieces and extracted with a director. By the beginning of November both the wounds had healed, and the patient was able to pass readily for himself a full-sized catheter. Mr. Keetley said that the abscess was on the left side of the penis ; no bougie nor catheter touched the calculus. It was an open question whether the calculus was an impacted one or whether it was a concretion lodged in a large lacuna.

DISCUSSION.—*Mr. Keetley* said if perineal section had not been done an anti-scrotal fistula would have occurred. The abscess was on the left side of the penis. Symes' staff passed easily through ; no bougie or catheter touched the calculus, the latter being lodged between the abscess and the urethra. He asked was it a calculus in reality, or was it a concretion ?

Mr. Pick, in the course of some remarks, congratulated Mr. Keetley and Mr. Benham.

Mr. Benham replied.

Dr. P. S. Abraham showed some microscopical sections of the cervical and sympathetic ganglia from a case of exophthalmic goitre.

Mr. H. Percy Dunn showed the following pathological specimens : (1) Aneurism of the thoracic, extending into the abdominal aorta, of which the lower portion of the sac is formed by the left psoas muscle ; (2) Epithelioma of the lower

third of the œsophagus, and of the cardiac orifice of the stomach, which has perforated the pericardial sac.

Ordinary Meeting, April 1st, 1887. Dr. Alderson, President, in the chair.

CLINICAL EVENING.

MALIGNANT POLYPUS OF THE NOSE.

Dr. Scanes Spicer related the case of a woman under his care suffering from malignant polypus of the nose.

Mr. Bruce Clarke said that he had lately been watching a similar case to that described by Dr. Spicer. The polypus was removed by forceps; ultimately the patient died, and at the *post-mortem* examination an abscess at the base of the brain was found.

Some remarks were made by *Dr. Thudichum.*

TRANSPLANTED MOLE.

Mr. Keetley showed an interesting case in which he had transplanted a mole from the face to the arm.

MULTIPLE LIPOMATA.

Dr. Colcott Fox exhibited a case of fatty tumours with linear atrophy. The tumours were symmetrical, those in the middle line being bi-lobar.

Dr. Thudichum made some remarks, and *Dr. Fox* replied.

XANTHELASMA PALPEBRARUM.

Mr. Jonathan Hutchinson, jun., brought forward a case of xanthelasma palpebrarum in a man of 60.

ADENOMA OF EXTERNAL EAR.

Mr. Bland Sutton showed a case of adenoma of the external ear, upon which he had operated successfully. The patient made an excellent recovery, and his hearing, which he had in great measure lost, was restored to him.

RHINOLITH.

Mr. Weiss exhibited a rhinolith which he had lately removed from a young girl.

Mr. Bland Sutton said such concretions usually formed around a foreign body.

Dr. Alderson, President, then read a paper on

TRANSVERSE FRACTURE OF THE PATELLA.

The specimen I have the pleasure of showing you this evening is one of considerable interest; it is the patella of a man who twenty-three years ago was admitted into hospital under the care of Mr. William Bird, when I was the house-surgeon. The man remained my patient during his life-time; he was not particularly strong, and his family history shows that he was of the neurotic type; he suffered occasionally from bronchial asthma, and sometimes from slight rheumatism, but never from arthritis, or any ailment of the knee-joint. He often told me that the broken knee was stronger and more useful than the other. The union in this case was so good, and the fragments so closely united, that when the patient left the hospital I almost thought that osseous union had been obtained. He died on February 19, 1887, from apoplexy. The following are a few notes copied from his hospital-card:

W. B., æt. 46, boat-builder (during the last twelve years he kept a public-house), married, was admitted into the West London Hospital on November 4, 1864, with a transverse fracture of the left patella. The fragments were very widely separated. The patient described his accident thus: he was returning home to Hammersmith from Gower Street railway-station, and going rapidly down the station stairs, which were tipped with brass and rather worn, his foot slipped, and in his effort to save himself he felt his knee-cap go, and, to use his own words, he could feel the lower fragment almost "half-way down his leg." Owing to the difficulty in conveying him to the hospital (about five miles), there was much swelling of the knee-joint, but the fragments could be easily felt. The limb was placed on a back-splint with foot-piece, and in an extended position; the fragments were brought closely together by my fingers, and maintained there by the nurse while I fixed them in the closest possible approximation by the aid of a small pad above and below the patella, the pads being fixed by strips of good adhesive plaster bound round the knee and a figure of eight bandage, and the patella left

exposed. The swelling was subdued and inflammation prevented by ice, irrigation, and an evaporating lotion. In two or three days, when the swelling had abated, the fragments were brought into closer position by the addition of very small strips of plaster also above and below the fracture. December 18: the knee was put up in a very firm gum and chalk bandage. December 22: patient discharged well, the gum and chalk bandage being still worn.

In less than a month after he left the hospital, he was able to resume his occupation. Before leaving hospital he was cautioned not to bend his knee for three months, and was supplied with crutches, but never used them. About five or six months after the accident he was landing from his boat, and the raft slipping he was obliged to jump; he fell on his knees, but on getting up, to his great surprise, he found that he could use one knee just as well as the other; he never walked lame or even used a stick afterwards.

Our pathologist, Mr. Percy Dunn, has kindly examined the specimen, and reports:—"The specimen in the dried state shows the original separation of the fragments to have been probably about one inch and a half. (I think the separation was much more.) The bond of union generally is one of dense ligamentous tissue, but in the centre of this is a bridge of osseous tissue, which is continuous with that of either fragment. It is probably the case that the union, primarily ligamentous, has undergone partial ossification in the long period of time which has intervened between the receipt of the injury and the death of the patient."

I would wish also to call your attention to the *enlargement of the broken parts*, and especially to the *new growth of bone*, and to the tendency of the fragments in this kind of fracture to turn forwards, which tendency is well shown in this specimen.

Believing it would throw some light as to the usual mode of union in transverse fracture of the patella, I visited the other day the Museum of the Royal College of Surgeons. There were fourteen specimens of this fracture mentioned in the catalogue. I do not know what means had been used to procure union in these cases, but I do feel sure the result was, as regards the usefulness of the knee, very inferior to the successful case I have the pleasure of bringing before this society.

Mr. William Adams mentions in vol. xiii. of the *Pathological Transactions* that out of "31 cases, 15 were ununited, 12 were true ligamentous union, and 4 were doubtful."

Now, it is because the treatment of transverse fracture of the patella is usually anything but satisfactory that I have availed myself of the opportunity the death of my patient, twenty-three years after the accident, has given me of showing his patella, for the case must have an interest for most, if not all of us. Although not of very frequent occurrence, yet transverse patella fracture is an accident that is sure to happen once or twice in the life of every surgeon who is in practice for any length of time (and probably oftener in the country), and it is an accident which, according as it is well or ill treated, has before now made or marred a practice. This case, too, has an additional interest to us, for on one of our clinical evenings about three years ago, I had the pleasure of showing the patient here, and you had the opportunity of examining his knee and asking him any questions relative to the accident.

I have mentioned that neither treatment, nor the result of treatment, of transverse fracture of the patella, is usually successful or satisfactory either to patient or surgeon. If it had been successful in the past, I scarcely think such a barbarous method of treatment as that of Malgaigne's hooks would have been adopted, even if invented. I recollect, when a student, seeing three of these in use at one time in the Clayton Accident Ward of the Middlesex Hospital, and, as far as I remember, the result was not very satisfactory. Neither do I think the frequent result of the present treatment of this fracture much more satisfactory, or the practice of cutting down on the bone and suturing directly the fragments would scarcely be recommended.

I think there may be two chief reasons why the treatment of transverse patella fracture is not more generally successful: (1) because sufficient care may not be taken in the early days to maintain the fragments in close juxtaposition, and (2) because the patient is not allowed to use the joint soon enough, and partial ankylosis occasionally happens. Looking at the patella as a sesamoid bone, our hope should be for ligamentous union, which would in time become converted into osseous union, as in the case before us, and this might sooner occur if we only allowed the patient to use the limb (at least, to a moderate extent) at an earlier period than it is now thought safe to sanction or to advise.

It would not surprise me if the surgery of the future should order the knee to be put up in starch as soon as all acute symptoms have subsided, and the patient allowed to get up

and to use the limb, although not to bend the knee for two or three months. This desirable result might be procured by placing the injured limb on a posterior splint with a good foot-piece, the limb being extended; for although the tendon of the quadriceps muscle is probably paralyzed by the violence of the accident, the paralysis is often only of short duration, and the muscle is apt subsequently to become irritable and disturb the fracture. The fragments must be brought into the closest possible approximation, and maintained there by such means as seem most suitable to the ingenuity of the surgeon. Inflammation should be combated or prevented by ice, irrigation, and discutient lotions, and internally by the administration of mild aperients. At the expiration of two or three weeks the knee should be put up in starch or gum and chalk bandage, and when this is quite hard the patient might be allowed to get up, if he could do so without pain and in comfort. The starch bandage should be removed in about six weeks, and a strong leather knee-cap be worn. Further movement should be then gradually increased.

Some families appear rather prone to fracture of the patella; my patient had a sister, aunt and cousin who met with this misfortune.

Mr. Keetley suggested that the joint might have become the seat of changes due to chronic rheumatoid arthritis.

Dr. Alderson replied that he had known the patient up to the time of his death, and no complaint had been made of symptoms pointing to that disease.

ELECTROLYSIS IN STRICTURE OF THE URETHRA.

Dr. W. E. Steavenson and **Mr. Bruce Clarke** gave a demonstration upon the living subject of the treatment of stricture of the urethra by electrolysis.

SPECIMENS.

Mr. H. Percy Dunn showed the following card specimens: (1) Epitheliomatous growth of the back of the pharynx; (2) The rectum of a child six months after operation for imperforate anus; (3) Scirrhus of the breast, showing several hæmorrhagic cysts.

Brigade-Surgeon W. Curran showed several drawings, and some slugs and fragments of bullets, illustrative of the behaviour of lead in the presence of bone.

Ordinary Meeting, Friday, May 6th, 1887. Dr. Alderson, the President, in the chair.

CLINICAL CASES.

Mr. Keetley showed a case of excision of epithelioma of the fauces, affecting the adjacent parts of the palate, tongue, and maxilla, with previous ligature of the external carotid.

Mr. Edwards, a case of recent suture of the patella.

Mr. Wainewright, a case of suture of the patella.

Mr. Dunn, a case of an albino.

Mr. Edwards read a paper on

SOME OF THE RARER FORMS OF RECTAL FISTULÆ.*

The author first drew attention to the difference of opinion existing between surgeons concerning the question of dealing with the sinus which extends upwards by the side of the bowel from the internal opening of a complete fistula. He considered that the treatment should depend upon the position of the sinus to the muscular coat of the bowel; if submucous it should be laid open, but if sub-muscular it is better to leave it, thus avoiding the risk of incontinence due to division of the fibres of the internal sphincter. A cure may be looked for after the frequent injection of the sinus with tincture of iodine. After touching upon some of the more frequent errors in diagnosis and operative treatment, the author pointed out that there seemed to be a definite relation between the internal and external orifices of a fistula; for fistulæ having their external orifices situate behind a plane passing transversely through the centre of the anus usually have their internal aperture in the middle line dorsally, while those with their external orifice in front of this plane generally terminate in an internal opening immediately opposite, thus forming a simple straight complete fistula. The author then spoke of horseshoe fistula which he defined as a fistula with one or more external orifice on either side of the anus, and an internal one in the middle line behind. He said that not only were the descriptions of this form unsatisfactory, as found in most special works on the rectum, but the operative measures, when mentioned, left much to be desired. Surgeons of the present day, when operating upon horseshoe fistulæ, either slit up the sinus on both sides of the gut, thus dividing the sphincter in two places, or they content themselves with the division of one

* This paper is published in extenso in the *British Medical Journal* of July 2nd, 1887.

sinus, hoping that the other may heal of itself, with or without the insertion of a drainage-tube. The operation recommended in these cases, and for which the author said he had to thank his colleague and friend, Mr. Goodsall, was as follows :—Complete division of the sphincter in the middle line dorsally, laying open the abscess cavity and internal opening, and the subsequent slitting up of each lateral sinus from the external orifice, to the central dorsal incision. By this means the whole of the fistulous track would be laid open and the sphincter would only suffer one division, and this in the most favourable manner, *viz.*, at right angles to its fibres, thus avoiding all risk of subsequent incontinence, which so often happens after the operation as usually practised. In conclusion, the author related two interesting and rare cases, one of fistula completely encircling the bowel, and the other of fistula originating in the pelvi-rectal space, *i.e.*, between the bowel and levator ani muscle.

Mr. Whitmore referred to that form of incomplete internal fistula which was associated with phthisis, and remarked that rectal fistulæ should always be operated upon early.

Mr. Keetley related the case of a married lady from whom he removed a growth the size of a Spanish nut from the submucous tissue of the rectum ; the operation was followed by a fistula which was treated by division of the sphincter, and a complete cure resulted.

Mr. Benham narrated some cases of rectal fistulæ which he had treated with success by injecting carbolic (1 in 20) solution.

Mr. S. Benton made some remarks upon the blind internal horseshoe fistula, which he said Mr. Edwards had not mentioned.

Mr. Chapman had used pure carbolic successfully in three cases of rectal fistula.

Mr. Edwards, in reply, said that no reliance could be placed upon the cure of a case with carbolic injections. The experiment could be tried, but division of the sphincter was usually called for. In phthisis the patient often derived benefit by having his rectal fistula operated upon.

Dr. Hewitt read a paper on

SOME POINTS IN THE SELECTION AND ADMINISTRATION OF ANÆSTHETICS,

limiting his remarks to the consideration of the following points: (1) the best method of administering nitrous oxide and ether, either in succession or in combination ; (2) the prevention of vomiting during or after the administration of an anæsthetic; (3) the danger of inducing general anæsthesia in persons suffer-

ing from obstructive dyspnœa; and (4) the possibility of dangerous symptoms occurring from the administration of opium or morphine prior to chloroform, ether, or other anæsthetics. He exhibited an apparatus which he had used for three years in hospital and private practice; it consisted of a Clover's portable ether-inhaler fitted with a special form of facepiece, and with a bag capable of holding two gallons of gas. By means of this apparatus any desired combination of nitrous oxide and ether could be given. The amount of gas in the bag was always sufficient, when administered with the facepiece shown, to anæsthetize a patient before gradually admixing the ether vapour; and the whole apparatus was portable, and could be charged before entering the room in which the operation was to be performed. By means of this apparatus there was no sudden transition from nitrous oxide to ether, as when facepieces were changed during the administration. Vomiting could be prevented by rapid and deep anæsthesia. In a large number of cases he had given half a grain of cocaine in half an ounce of water shortly before the administration of an anæsthetic. This was done with the object of lessening the sensibility of the gastric mucous membrane. Vomiting after anæsthetics was best prevented by keeping the patient upon his side, and by moving him as little as possible. The danger of inducing anæsthetic sleep in persons suffering from obstructive dyspnœa was then considered. Patients in this condition were dependent for their existence upon an increased activity of their respiratory mechanism, and failure of respiration was very likely to ensue under chloroform or ether.

Mr. Lloyd showed an improvement in ether-inhalers, which consisted of a bag of very fine india-rubber, the cost of which would be found to be so immaterial that one could be used for each patient anæsthetized. The bag would, of course, take the place of the ordinary bag as used at present, and would be destroyed after use; thus the ether apparatus could not become a source of infection, either of the tubercle bacillus or any infectious disease, and is altogether more cleanly.*

Mr. Davis said that chloroform was the best anæsthetic in ovariotomy.

Mr. Mackinlay remarked that he had always insisted upon a patient being deeply under the influence of an anæsthetic before dividing the optic nerve in enucleation of the eyeball.

* The india-rubber bags proved too expensive. A paper bag has since been made by Messrs. Barth and Co., which I have used and found to answer every purpose. [R.W.L.]

Partial anæsthesia, he thought, was in such cases fraught with some danger.

Mr. Alderton related the case of a man who died under ether, who had been admitted for a small operation upon the mouth. He deprecated the custom of hurrying patients into hospitals, and hurriedly operating upon them without preparing them.

Dr. Hewitt replied.

Dr. G. N. Pitt read a paper on

THE ASSOCIATION OF MITRAL STENOSIS WITH GOUT AND GRANULAR KIDNEYS.

The attention of the author was first drawn to this relationship about four years ago by a gouty man, over 50, admitted with an attack of hemiplegia due to cerebral hæmorrhage, who had granular kidneys. There was a loud first sound, with a short, definite, blowing, systolic *bruit* limited to an area of an inch in the region internal to the apex-beat, and mitral stenosis was diagnosed. Shortly afterwards a man who had only a loud first sound at the apex, with no second sound audible, whose kidneys were cirrhotic, was found, *post-mortem*, to have also a contracted mitral orifice. Since then he had observed several cases: there had usually been no difficulty in diagnosing the granular condition of the kidneys, but the stenosis of the mitral had sometimes been unsuspected till after death, and while its existence was often readily diagnosed in some, it could only be suspected in others. A presystolic *bruit* was the exception rather than the rule.

Quite recently, there had been two cases under his care. The first was a woman, aged about 50, who was admitted comatose, with meningeal hæmorrhage. She had granular kidneys, and a small mitral orifice, which was suspected from the marked accentuation of the first sound and the feebleness of the second at the apex. The other was a woman, aged 45, with albuminuric retinitis and granular kidneys, who for a long time had only an accentuation of the first sound and absence of the second at the apex, with a soft, long, systolic *bruit* internal to it; she had now developed a well-marked presystolic *bruit*.

The symptoms which have been most frequently observed in this group of cases are—a loud first, and a weak or absent second sound at the apex, accompanied or not, as the case may be, by a systolic *bruit*, which often may be extremely localized. The second pulmonary sound is usually accentuated or reduplicated. At times only, a presystolic rough or rumbling

bruit is audible. It is, hence, not at all surprising that an inexperienced auscultator should record that the heart-sounds are normal, as it is some time before students recognise that other signs besides the mere presence or absence of a *bruit* may be of importance.

He had searched the records of the Guy's Hospital *post-mortem* room for the preceding ten years, and found that during that period there were 542 fatal cases with granular kidneys, of which 33 (23 women, 10 men) had mitral stenosis (that is, 6 per cent.), while only 2 per cent. of the total fatal cases showed mitral stenosis ; so that a contracted mitral is three times as common among patients with granular kidneys as among other patients.

During the same period there were 115 cases of mitral stenosis, and one-fourth of them were also suffering from granular kidneys ; a further examination showed that while the proportion was about one-fifth for the men, it was one-third for the women. Two-thirds of all the cases of mitral stenosis occurred in women.

Most authors allow that atheroma of the vessels and endocardium is a frequent sequence of granular kidneys, and hence that aortic failure, which is the most frequent result, is more common among aduits than among children.

In children, rheumatism is the predominant cause of valvular disease, and we find both mitral incompetence and mitral stenosis frequently resulting. He was not aware, however, that attention had hitherto been drawn to the fact that one-third of all the fatal cases of mitral stenosis in women, and one-fifth in men, are associated with granular kidneys ; and if the cases under puberty be excluded, the proportion for women amounts to almost one-half. Of these, doubtless the complication is a mere accident in some, but there is a large number in which the secondary degenerative vascular lesions set up by the impure blood and high blood-pressure have led to thickening and contraction of the mitral orifice.

On looking at the reports, he was struck by the number of cases in which the women had borne children, and it was noted that the kidneys were scarred as well as granular—lesions most probably due to consecutive nephritis during pregnancies.

Whether the nephritis set up by pregnancies is more likely, on account of the concomitant factors of impure blood and excessive abdominal tension, to set up sclerotic changes in the endocardium, is at present unknown, but the increased proportion of granular kidneys among the female cases of mitral stenosis points that way.

An analysis of the 23 female cases of granular kidneys shows that in only 3 cases was there a history of rheumatic fever, and in 1 of these there was also gout. In a fair proportion of the others it is probable that the granular degeneration of the kidneys was a consecutive nephritis, due to pregnancy or other uterine trouble. The hearts were larger than the average, and the kidneys smaller; hence it is most probable, in the absence of any other cause, that in most of the cases the mitral stenosis was secondary to the kidney degeneration. The ages of the patients were between 32 and 58 in 17 out of 22, and between 46 and 66 in 7 of the cases. The youngest patient was 21.

An analysis of the 10 male cases gives a history of gout in 4, rheumatic fever in 3 (1 being also gouty), cancer of pancreas and syphilitic lardaceous disease in one each. The evidence is also strongly in favour of the mitral stenosis being secondary to the granular condition of the kidneys in 7 of the cases. In 9 out of the 10 cases the ages lay between 46 and 66; the other patient, whose cardiac trouble was probably rheumatic, was aged 35.

If granular kidney be produced by heart-disease, it would not be unreasonable to expect that among this series of cases there would be some among young people, in whom mitral stenosis is not uncommon, yet only 2 patients are under 32. Hence, as the two diseases are frequently associated, we are led to the conclusion from these cases that granular kidneys are a frequent cause in middle life of mitral stenosis, but that this cardiac degeneration only ensues in a few cases of granular kidney, and that there is no definite evidence that mitral stenosis produces granular kidneys. It is also instructive to notice that the average age at which the women die is 42, while the average age of the men is 52, the primary cause in the former frequently being pregnancy, and in the latter gout, and this is probably the explanation of the difference in the ages.

A discussion upon this paper not being possible, owing to the lateness of the hour, a cordial vote of thanks was unanimously passed to Dr. Pitt.

Mr. Percy Dunn showed the following pathological specimens:—(1) Sarcoma of the os uteri; (2) Sarcoma of the dura mater; (3) A kidney and adjacent parts showing a large extravasation of blood into the peri-renal tissue of the left side.

Mr. Benton showed a pedunculated growth removed from the rectum of a man, æt. 46.

THE CAVENDISH LECTURE.

ON A SPEEDY AND SOMETIMES SUCCESSFUL METHOD OF TREATING HAY-FEVER.

DELIVERED BEFORE THE WEST LONDON MEDICO-CHIRURGICAL SOCIETY,

BY SIR ANDREW CLARK, BART., M.D., F.R.S.,

Emeritus Professor of Clinical Medicine, and Consulting Physician to the London Hospital.

It has been sometimes said by way of reproach that the scientific workers in medicine, although eager in the pursuit of knowledge for its own sake, were careless of its practical applications to the treatment of disease. If at any time this reproach was a just one I do not know, but beyond all manner of doubt it would not be a just one now, for in almost all countries, and in nearly every school of every country, you can see not only the earnest pursuit of knowledge, but the most zealous efforts to force it into fruit for the uses of men; and in the study of no subject could you find a better proof of this than in the study of hay-fever, of which I am about to speak. From Blackley of Manchester to Mackenzie of Baltimore you will find a succession of inquirers whose efforts to discover the nature of this malady have been accompanied by efforts equally earnest and persevering to discover its most appropriate treatment. And from America, most earnest and persevering of all countries at work, we have received the largest and best fruits of this double pursuit. And to-night the plan of treatment of hay-fever which I shall have the privilege of submitting to your consideration is entirely founded upon a physiological study of the disease. It is, however, with the results of this study only in so far as they bear broadly and directly upon treatment that I propose to occupy myself. With minute discussions as to the nature of hay-fever, its physiological and pathological relations, and the causal agencies engaged in its evolution, I shall have to-night only an indirect concern. Nevertheless, as I wish to set forth the true grounds for a rational treatment of this malady, such discussions cannot be passed over entirely.

Before proceeding further, I wish to pause for a moment,

and advert to the name by which this malady is known. From nothing has medicine suffered more than from hypothetical naming. What may seem to be the correct and adequate hypothesis of to-day may become the incorrect and inadequate hypothesis of to-morrow; and when the true nature of a malady is discovered, the diffusion of the discovery is hindered, if not prevented, by the retention of a name which, established by custom and continued from convenience, conceals the truth and perpetuates the error. I could adduce few better illustrations of this than the naming of the disease under consideration. The epithets of hay-fever, hay-asthma, pollen-fever, rose-cold and peach-cold are widely open to this objection. They withdraw the attention from internal states, and they tend to narrow our ideas of causality within the limits of outward things. It is true that the pollen of certain grasses is the most common exciting agent of the paroxysm of hay-fever, but it is also true, for it has been demonstrably proved, that the paroxysm can be excited not only by other external agents, such as light and heat and dust, but also by local affections of the nose and throat, by irritations propagated from distant parts, and by influences generated *de novo* in some part of the central nervous system. It is only of late, and through researches made for the most part in America, that we have come to a knowledge of these facts. Even there, however, the tendency to hypothetical naming continues, and the term proposed by Mackenzie of Baltimore, to whom we owe so much of what is best in our recent knowledge of this subject, is not free from grave objections. He calls the disease periodic vaso-motor coryza, but in this designation there is involved a hypothesis which to-day may be doubted, and which to-morrow may be disproved. Nor are the epithets proposed by myself—periodic specific coryza and periodic nervous coryza—free from just and grave objection. We are thus in need of a proper name for our malady. No one can be rightly framed except out of its commoner physical characteristics, and no one can be safely used unless it shall imply no hypothesis, and be capable of remaining always the same, however much our theories of the disease may change. Of the innumerable persons exposed in similar, if not identical, conditions, to the exciting causes of hay-fever, only a few are affected with the disease, and of those few there are, strange to say, scarcely any among agricultural labourers and gardeners, who are habitually exposed to the pollen of grasses believed by some authors to be the sole causal agents of the

development of the asthmatic paroxysm. It seems, therefore, only fair to conclude that in the evolution of the malady some other agent than the external exciting cause must be directly concerned. Further investigation proves this conclusion to be correct. From experimental examination we learn the existence of a second factor in the production of this disease, a factor which resides in the mucous membrane of the nose, mouth, pharynx, and eyes, which mainly concerns the nerves of these parts, and which manifests itself in all their histological constituents by a peculiar irritability of reaction to certain excitants.

Furthermore, when in cases exhibiting this peculiar local irritability we pursue our inquiries into the characters of the constitutional state associated with it, we discover certain *bizarre* symptoms of disorder which belong exclusively to the nervous types of organization, and which stamp the organism exhibiting them as specifically and pathologically "nervous."

Lastly, if, pursuing our investigations further still, we institute an analysis of the *differentiæ* distinguishing the nervous constitution in this disease from the nervous constitution of cognate affections, we are led to the conclusion that they reside for the most part in the respiratory and vasomotor centres, and in the ganglia connecting and connected with both.

In this way we discover reasons for believing that there are three great factors concerned in the evolution of hay-fever: the nervous constitution, the irritable local state, and the exciting cause. As a general rule, to which there are some remarkable exceptions, all these factors, although in varying degrees, co-operate in the development of an attack of hay-fever. Concerning each of them I have to offer a few observations which will make plain the ground upon which a rational treatment of this malady can be based.

The nervous constitution associated with hay-fever is sometimes inherited and sometimes acquired. For the most part inheritance comes from the arthritic and the nervous. When acquired, it is acquired most easily by those who are most closely subjected to the complex influences of over-civilization; by those who lead laborious, sedentary, and intellectual lives, as well as by those who, avoiding the difficulties and discipline of life, seek luxury with ease; by those who prefer excitement to duty; and by those who become weak through failure to exercise their strength. And when once hay-fever

appears it exhibits still further the closeness of its relationships to the nervous system by choosing the man before the woman, the educated before the ignorant, the gentle before the rude, the courtier before the clown. Some of the more general affinities of hay-fever are harder to be understood. It prefers the temperate to the torrid zone, it seeks the city before the country, and out of every climate which it visits it chooses for its subjects the Anglo-Saxon, or at least English-speaking, race.

And now concerning the second factor in the evolution of hay-fever—the condition of the mucous membrane of the nasal cavities and parts adjacent—we have divers and some diverse views. All observers are agreed that there is some pathological condition of the affected parts, but no two of them are agreed as to its exact nature. For my own part, I conclude from the investigations which I have pursued into the matter that there is one fundamental condition which reconciles all these varied and sometimes opposing views. This condition is one of irritability, and the irritability is of a sort which involves the nervous, vascular, lymphatic, and cellular constituents of the affected parts, and, when excited, disturbs the chemical, morphological, and secretory changes taking place therein. When this local irritability is provoked into action there arises a series of local structural changes which are all but characteristic of the paroxysm of hay-fever. The erectile tissue becomes distended, the blood-vessels are gorged with blood, groups of lymph-cells fill the lymphatic spaces, the mucosa is crowded with migrating leucocytes, younger epithelial cells are vacuolating and proliferating, secretion is increased in quantity and altered in character and composition, sensation is sharpened, altered, or benumbed, and the whole metabolism of the affected region is profoundly disordered.

These local changes are always present in the paroxysm of hay-fever, and whenever they concur and co-operate it may be safely said that hay-fever is present. When this local irritability exists in an extreme degree, almost any exciting agent—an odour, a vapour, dust, a touch, light, or heat—will quickly call forth the whole series of structural changes already described as almost exclusively characteristic of the paroxysm of hay-fever.

And now let me speak shortly of the third factor engaged in the evolution of this malady—that is, of the external, exciting, or determining causes to which it is commonly

ascribed. Authors in general, from Gordon in 1829 to Mackenzie in 1885, advocated the view that the paroxysm of hay-fever is due, in persons of a certain idiosyncrasy, exclusively to the action of the pollen of grasses or of flowers upon the mucous membrane of the nasal cavities and adjacent parts. In support of this view, it is contended that the disease occurs only during the season when certain grasses and flowers are in blossom, that it may be artificially induced by the application of pollen to the nasal mucous membrane, and that it may be prevented from occurring, or may be cured when present, by dwelling on board ship at sea where no pollen is to be found. Now, whilst it must be admitted that these contentions are in some degree just, and that the most common exciting cause of the hay-fever paroxysm lies in the action of the pollen of certain plants upon the nasal mucous membrane, it cannot be denied that they require qualification, and that they are inadequate to a complete explanation of all the facts which make up the history of this disease.

For on this side it may be contended, as proved, that the malady is less common among agricultural labourers and gardeners than among other persons, that sometimes it occurs at other seasons of the year than in the hay season, that it has been induced by local irritants in which pollen did not exist, that it has occasionally arisen in consequence of irritation in a part with which the nose is in sympathy, and that the mere action by itself of pollen upon the nasal mucous membrane is insufficient to provoke a complete paroxysm of hay-fever. For myself, I am compelled by my inquiries to adopt the view that in the evolution of almost every attack of this malady the three factors already mentioned are at work—the nervous constitution, the local irritability, the external exciting cause—and that, whilst this last is most commonly a pollen acting more in virtue of its physical characters than of its intimate nature, it may be any other agent capable of calling into action the irritability of the parts concerned in the mucous membrane of the nose.

And now, when we consider these facts and theories of hay-fever with the view of framing a rational plan of treatment, we find ourselves beset on every side with difficulties. Theoretically the objects to be achieved by treatment are—the soothing and strengthening of the general nervous system, the allaying of local irritability, and the removal of the exciting cause.

To remove the exciting cause, or, rather, speaking correctly,

to remove the susceptible person from it, is to prevent the oncoming of the disease, and if you send him to sea or to the summit of some Alpine height, you will assuredly succeed. There are, however, many who cannot follow this counsel, and who must remain under the influence of the exciting cause of the malady. What can be done for the patient in such circumstances? We may strive to strengthen by tonics the weak and irritable nervous constitution, and Morell Mackenzie has had some success with valerianate of zinc and assafœtida, whilst Blackley has failed with every drug which he has tried. By common confession general treatment, although not useless, is never by itself successful.

We are therefore compelled to turn to the study of local treatment as the chief mode of relieving or curing this disease. There are three plans of local treatment:

The first plan is to *allay* the irritability of the nasal mucous membranes.

The second plan is to *exhaust* the irritability of the nasal mucous membrane.

The third plan is to remove or to modify, or to destroy by caustic, or by cautery, galvanic or igneous, such portions of the nasal mucous membrane as are found, or are believed to be, the seat of the pathogenic irritability. This third and most radical plan of treatment is practised for the most part, I believe, in America, and in the hands of Daly of Pittsburg, Roe of Rochester, and Mackenzie of Baltimore, it has been followed by lasting and signal success. But as there are not as yet at our disposal materials sufficient to form a critical estimate of the relative value of this mode of treatment, as I have myself no personal experience of the practice of it, and as in this imperfect lecture my chief object is to submit to your consideration the plan of treatment designed and practised by myself, I dismiss for the present from further consideration all operative procedures of this radical kind.

The first plan of treatment proposes to prevent or to cure hay-fever by allaying the pathogenic irritability of the mucous membrane. This was the object which I endeavoured to achieve when I began my therapeutical experiments in the treatment of this disease. From trials extending over several years, no remedies of this sort, except aconitine or atropine, returned me any results of the smallest value, and the results returned by the use of these alkaloids were so insignificant. and the effects following it were sometimes so disagreeable, that I abandoned my inquiries in this direction. The

introduction of cocaine, however, and its recent employment in the treatment of hay-fever, induced me to reopen my experiments in this direction. At first my success was considerable, for three out of five cases were immediately relieved, and the relief was maintained by the frequent renewal of the application of cocaine to the nasal mucous membrane. But when, last year, my experience of the use of this drug somewhat increased, my success in using it diminished. In one case the application failed and disagreed; in another case it neither disagreed nor failed; but I was quite unable to discover in the patients the grounds of this difference of action. Nevertheless, although it appears to me that the success of cocaine as a local remedy in hay-fever has been overrated, although the necessity of frequent application is troublesome, and although its use is not free from inconveniences which might eventually prove something worse, I am of opinion that its success and its comparative freedom from injurious consequences are sufficient to justify, with careful watching, a longer and larger trial.

There are three ways of using cocaine in the local treatment of hay-fever; it may be used in the form of a solution, of a spray, or of a nasal bougie. Personally, I prefer to use a solution varying in strength from 5 to 15 per cent., and I apply it to the interior of the nose and the back of the soft palate by means of a large camel-hair pencil attached to an aluminium shank, and bent at an appropriate angle. For use in the form of nasal bougies, from a quarter of a grain or more, of the hydrochlorate of cocaine is dissolved in a mixture of gelatine and glycerine, and made of different weights and shapes, according to the peculiarities of the case in which they are to be employed. For using cocaine in the form of spray, some efficient and ingenious spray producers have been invented. Many of them have been furnished with nozzles so constructed that the spray can be applied directly to almost any part of the nasal and pharyngeal cavities. These spray-producers, with weak cocaine solutions, are sometimes very useful in allaying the small but still troublesome irritation which, in the intervals of the hay-fever paroxysm, is apt to arise in the ears, eyes, and mouth. By the great kindness of Mr. Martindale, to whose pains, intelligence, and accuracy in matters of this kind we are all so much indebted, I am enabled to show you all these preparations of cocaine, and all the instruments wherewith they are used.

I come now to consider the second plan proposed for the

local treatment of hay-fever. The object of this plan, which includes constitutional treatment, is to subdue the irritability of the nasal mucous membrane to such an extent that it shall no longer react to special or common irritants, whether pollen or dust, in a pathogenic manner. In the first place, the patient is put upon such a regimen as will conduce most to the improvement of his general health. He is instructed to have a simple but liberal dietary, to be extremely moderate in the use of alcoholic stimulants, to have daily exercise, to follow early hours, and to continue, if that be possible, even at the cost of suffering, his ordinary occupations. If the patient is very weak, he is instructed to take with meals drachm doses of Easton's syrup, with three or more drops of the solution of hydrochloric of arsenic. If he is nervous as well as weak, I prescribe for him, in their full respective doses, tartarized iron, ammonium bromide, tincture of nux vomica, and solution of arseniate of soda. In some cases I think that I have seen great benefit follow the use, thrice a day, of five grains of sulphate of quinine dissolved in citric acid, and given in effervescence with carbonate of ammonia. For the strictly local treatment, there are required a common laryngeal brush and a carbolic mixture. This mixture is composed of glycerine of carbolic acid one ounce, hydrochlorate of quinine one drachm, and a two-thousandth part of perchloride of mercury. Heat will be required in order to dissolve the whole of the quinine; without heat, Mr. Martindale informs me that the glycerine of carbolic acid will dissolve only half the quantity prescribed.

Let me now describe the method of procedure to be followed in applying the carbolic acid mixture to the mucous membrane of the nasal cavities. If there is much mucus in the nostrils, cleanse them by means of a douche of warm water containing boro-glyceride * in the proportion of an ounce to the pint. Dip the laryngeal brush in the carbolic acid mixture, and see that the brush is full but not overflowing. Place the left hand on the left side of the forehead, and the thumb on the tip of the nose, with the shank of the brush between the thumb and two forefingers of the right hand, and the brush itself directed upwards, push it gently but firmly into one of the nostrils, carry it as high as you can without inflicting injury, move it about so as to bring the mixture in contact as much as possible with the interior of the upper

* Before the introduction of boro-glyceride, I employed a five-grain solution of chlorate of potash, which was less efficient.

part of the nostril, and then withdraw it. With another brush filled with the carbolic acid mixture, or with the same brush washed, dried and replenished, you complete in the manner following the two operations required for each nostril. Having the left hand in the position already described, and the right hand holding the laryngeal brush with the hair pencil directed forwards from the body of the operator, push the brush along the floor of the nostril into the pharynx, and after ensuring free contact with the adjacent parts withdraw it. If during this operation the brush is over-full, some of the carbolic mixture will fall into the throat and excite coughing or some other discomfort. When you have thus finished the treatment of one nostril, and carefully removed any of the carbolic acid mixture which may have been spilt upon the nose or lips, you will proceed to treat the second nostril in exactly the same manner as you have dealt with the first. During the performance of these manœuvres great assistance will be obtained from the left hand of the operator being placed over the left side of the face and forehead of the patient. With this hand the operator can adjust the patient's head to the various movements of the laryngeal brush, and with the thumb of the same hand placed on the tip of the patient's nose, the opening of the nostril can be adjusted to a convenient size and shape. When the local effects of a paroxysm are severe, and have extended to the back part of the soft palate, it will be desirable to introduce through the mouth into the pharynx the laryngeal brush, moderately filled with the carbolic acid mixture, and there, by a manœuvre easily acquired and practised, to brush the posterior surface of the soft palate and the adjacent parts.

The immediate effects of these manœuvres differ in different persons and in the same person at different times. In all cases the effects are more or less disagreeable, and last from half an hour to half a day. Sometimes a little blood-stained mucus is discharged from the nose and throat, sometimes there is a slight frontal headache, sometimes there is a trivial cough, and occasionally you will have developed all the local phenomena of a paroxysm of hay-fever.

When advising a patient with hay-fever to submit to this plan of treatment for its relief, I have found it expedient to warn him beforehand of the disagreeable effects which sometimes follow the application of the carbolic mixture, and to assure him that they are both brief in duration and devoid of danger. When this warning is withheld, some patients will

grossly exaggerate their sufferings, ascribe all sorts of injurious consequences to the application, and cover the physician with undeserved reproaches. Sometimes a single application of the carbolic acid mixture is sufficient to prevent for a whole season the return of the hay-fever paroxysm, and four times within my own knowledge it has never reappeared. Usually two or three applications are necessary to insure a full chance of success. The length of the interval between the applications must be determined by the character of the immediate effects. If these are mild, the applications may be renewed on alternate days ; but if severe, at least three days should elapse between succeeding applications.

Of the measure of success which has followed this treatment of hay-fever, now practised over twenty years, I am unable to speak with exactitude. Patients when relieved seldom, and when unrelieved never, return to record their experiences, and I have been unable to get at the subsequent histories of more than a third of the number of persons whom I have treated. It is, however, my conviction that of this roughly estimated third whose cases I have been able to follow, a half has been cured for the season and four persons have been cured "for good." This you will say justly is not a success of which to boast. Quite so. But if you will compare the results of this treatment with the results of every other treatment, not excepting the cocaine treatment, which is its closest rival, you will have to confess that, however small may be the measure of success, it is not one which you can afford to despise. At any rate a communication of this kind is entitled to your indulgence, inasmuch as it is an honest, although very humble, endeavour to press pathology into practice and to take away the reproach which has been cast upon us of ignoring or of repudiating the natural and just alliance which should unite in closest relationship the science with the art of medicine.

SESSION 1887-88.

REPORTS OF PAPERS, CASES, DEBATES, ETC.,

AT THE

ORDINARY MEETINGS OF THE SOCIETY.

Ordinary Meeting, October 7th, 1887. Mr. C. B. Keetley, F.R.C.S., President, in the chair.

PATHOLOGICAL SPECIMENS.—**Mr. Percy Dunn** showed the following pathological specimens:—1. Recurrent growth of carcinoma in the breast. 2. Large hæmorrhage into the pons varolii with an aneurism of the arch of the aorta. 3. Atheroma of aorta.

CLINICAL CASES.—**Dr. Seymour Taylor** showed:—1. A case of lateral sclerosis. 2. A case of syphilitic gumma of the tongue.

PRESIDENT'S INAUGURAL ADDRESS.

ON THE SURGERY OF THE KNEE-JOINT.

INAUGURAL PRESIDENTIAL ADDRESS DELIVERED BEFORE THE WEST LONDON MEDICO-CHIRURGICAL SOCIETY, ON OCTOBER 7TH, 1887,

By C. B. Keetley, F.R.C.S., President.

GENTLEMEN,—I propose to contrast the treatment of the principal affections of the knee-joint and its immediate neighbourhood as practised at the present day with that in favour with the leading surgeons ten years ago.

The knee is a region pre-eminently fitted to be chosen for such a contrast. It is so superficial that the alterations produced in it by disease are manifest and clearly marked. It is so liable to disease and so exposed to accident that the

most youthful and inexperienced surgeon is familiar with it. Its affections are also types of all surgery ; not only are chronic pulpy disease of the synovial membrane of the knee and central necrosis of the head of the tibia types of similar affections which attack the other great synovial membranes and epiphyses of the body, but even genu valgum, properly understood, is a key to the comprehension of scoliosis, of flat foot, and of other leading deformities, of which a false pathology, a false etiology, and a misguided treatment are even to this day too frequently taught and practised. Let anyone study carefully the facts and opinions on chronic disease of the knee-joint to be found in the handbooks and monographs of ten years ago, and he cannot fail to see that in those days, recent as they are, the rich man with chronic knee-joint disease who submitted to an operation was little better than a fool, while the poor man who was operated on in order to get independence and the means of earning a living for himself and his family was a hero. In short, ten or twelve years ago, it was the practice, and then the correct practice, founded on the experience of the time, to tell a patient with a diseased knee, if he was no longer quite young, that his choice lay between, on the one hand, immediate amputation of the thigh, and, on the other, a long, tedious process of treatment, very likely involving three, five, or even ten years' incapacity for following his employment, and, as likely as not, ending in amputation after all. He had also to be told that his chance of life or death after amputation was no better than two to one.* If the patient were a child or an adolescent, not very different information could be honestly given. Amputation at that age was comparatively safe, but excision was still very dangerous. Of ninety-seven cases collected by Bryant, twenty-seven died.

Scarcely less serious were the long periods required for treatment after excision. "Roughly speaking, the average duration of treatment (after excision) was about eight months," wrote Holmes ; but this is short compared to the period during which the poor patients, almost all belonging to the lower orders, probably required treatment, but did not get it, from sheer weariness on the part of the doctor or the patient, or the parents of the latter, or from the pressure of house-committees.

Now let us turn to the present time. In the first place, it is now, practically speaking, quite safe for a surgeon experienced

* Bryant's statistics of 119 amputations in patients between the ages of twenty and forty. See Erichsen, vol. ii., p. 272 (date 1877).

in such operations to open wide the knee-joint and explore its every crevice ; moreover, within two or three months he can expect to see every part of the joint and every muscle acting on it completely restored again. The history of the operation for suture of the patella proves this. It is true that some unfortunate results have occurred and a few fatal ones ; but when we remember what a large number of sutures of the patella have been done by surgeons with little or no practical experience of such operations, and many of them quite recent converts to a faith in antiseptic surgery, after being trained to habits absolutely inconsistent with it, and, like all habits, difficult to shake off—when we bear these facts in mind, we should be surprised, not at the occasional failure of the operation, but at its frequent success. But this is not a mere question of numbers. Look at the *quality* of the success in most cases of antiseptic suture of the patella, the rapid convalescence, the perfect restoration of function, and the absence of every sign of danger from first to last.

In the matter of operations, a surgeon can speak, after all, only for himself, and for those with whose practice he is personally familiar : it is, therefore, merely a cautious and guarded mode of speaking, and not vain boasting, when I say that I feel less fear now about opening and examining a knee-joint than I felt ten years ago about excising a fatty tumour. Not that I can count excisions of the knee by the dozen, but because for some years I have been week by week acting on the faith I have just declared, and have found in every bone and every joint, and nearly every cavity of the body, my confidence justified. But I never myself commenced to practise in any department of operative surgery without feeling the disadvantages of inexperience, and being, moreover, shown by the course of events what dangers are run by the patient on whom the surgeon tries his 'prentice hand. For instance, my first case of osteotomy suppurated and did no good. In only two instances since has a single drop of pus formed, and in these two the ultimate result was excellent and not long delayed. In fact, let us never forget to distinguish between the dangers of an operation and of the particular operator who does it.

It is no longer necessary for the honest surgeon to tell his patient with diseased knee that to submit to operation is to run a risk as great as that of fighting in a forlorn hope. On the contrary, given a patient free from consumption, not hopelessly exhausted and broken down, and not over forty years

of age, I can honestly tell him that I can open his knee-joint and either remove the diseased parts, or excise the joint, or amputate, according to what may be required in his individual case, with no fear of serious risk to life. And the prognosis as regards the quality of the limb, if saved by operation, is also extraordinarily improved.

What was the ordinary result of a successful operation ten years ago? A limb greatly shortened, the foot sometimes nearly on a level with the lower part of the opposite calf, the knee often greatly bowed outward and bent forwards, almost always absolutely stiff, and, if movable, weak and unreliable. Now, as to shortening, I will, if all be well, exhibit in the course of the session a series of cases, each a type of a different mode of operating suitable for cases like itself. In only one will you detect marked shortening, and that scarcely enough to be either a disfigurement or an inconvenience. In one of these cases there is excellent mobility, and no weakness therewith. How long were they in hospital after operation? An average of two or three months each. Has any sinus or sign of disease remained? No.

It remains now to indicate how these improved results can be attained. In the first place, it is now recognised that the diseased soft parts, the degenerated synovial membrane, and the infected bursæ require removal as much as do the carious portions of bone. Not a hint of this was to be read, at all events in English works, a dozen years ago. Secondly, healthy bone is, as a rule, left alone. The practice of removing sound bone or cartilage, because they *might* become diseased if left, should now be scouted as ridiculous, if not monstrous. Whatever healthy bone is taken away is removed for mechanical reasons—*e.g.*, to prepare two surfaces suitable for cohesion when speedy osseous ankylosis is expressly desired, or to give access to concealed parts, or to make a channel for drainage. Thirdly, when disease has spread to the shaft of the bone, the medulla is scraped out, and the surgeon does not go on either slicing away one inch after another of the shaft, or else proceeding to amputation instead of excision.* Fourthly, the effect of certain drugs on the diseased parts is known and utilized. Fifthly, the joint is opened in such a way and closed, after operation, by such means as completely restore the joint capsule and the muscles and aponeuroses around it. Sixthly, a better system of drainage has been introduced. Seventhly, dressing and after-

* See 'Annals of Surgery,' 1885, vol. i., p. 1.

treatment have been greatly improved. Eighthly, after excision the bones are wired. The diseased soft parts, the pulpy synovial membrane, and so much of the ligaments and bursæ as may be diseased, are carefully cut away with scissors. In many cases these are the very centre and focus of the disease, such bone and cartilage as may suffer being attacked quite secondarily, and sometimes to an insignificant extent—as, for instance, was the case with the young woman whom I will show you, who recovered rapidly and with a very movable joint. This excision of soft parts has to be done with great care and thoroughness; but it is not necessary to remove absolutely every vestige of disease in order to effect a cure. In this respect tuberculosis of the joints differs markedly from cancer. As a matter of fact, tuberculosis tends to die a natural death. Time will kill local tuberculosis unassisted by the surgeon. The misfortune is that it is so dilatory in the exercise of its healing powers that very often the patient or his joint, or both, are destroyed before the disease, but when vigorously helped by the surgeon, time wakes up, as it were. It has been often observed, after excision of a joint, that tuberculous granulations have sprung out, say, from a sinus left by a drainage tube, lived a precarious existence, and then perished spontaneously, or with very little interference from the surgeon. Nevertheless, it is well to operate with the greatest possible care and thoroughness.

Next, with regard to the treatment of healthy bone, it used to be the rule to take away the patella lest it might become diseased. Some surgeons—*e.g.*, P. H. Watson of Edinburgh—opposed the practice, but they were exceptions. Now, when once the tuberculous foci have been found and thoroughly removed, not an atom of bone should be cut away except to favour drainage, or to make opposed surfaces fit after excision. After a really complete and systematic operation on the tuberculous knee-joint the fear of recurrence is small. And if we are to attempt to abolish it by removing all cancellous bone in which the return can possibly take place, amputation may as well be done at once. In fact, those surgeons who, with these views, always amputate and never excise are strictly logical. In children, more bone and articular cartilage have usually to go than in adults. I have several times completely, or almost completely, scraped out the bony part of the epiphyses, always carefully leaving the so-called epiphysial cartilage, and removing no more of the articular cartilage than was either necessary to give entrance to the sharp spoon, or

was itself diseased. The cartilage on those parts of the femoral condyles which actually touch the opposed articular surface should be, as far as possible, left untouched. Any small diseased points in it may be carefully picked out. If both articular and semilunar cartilages are healthy, the latter may be left.

Now with regard to drugs. Those best adapted for the purpose are solutions of sublimate (1 in 1,000), and iodoform in crystals. That the latter has a really specific influence on the tuberculous *materies morbi* (it is quite unnecessary to enter into the question of whether it is or is not Koch's bacillus) can scarcely be doubted. Always should iodoform crystals be dusted over the surface operated on, and especially in the crevices and recesses of the joint, where there is most danger of portions of infected tissue having been left behind. To place the iodoform in these, the cutting spoon may itself be used, in its capacity as a spoon, not as a cutting instrument. The iodoform should be placed before the Esmarch's bandage is removed and while the joint is dry. Free sponging and douching with the sublimate solution should precede the iodoforming. It is dangerous, expensive, and not necessary to use iodoform extravagantly, and the crystals, as being less quickly and easily absorbed, are safer than the ground powder. An ethereal solution of iodoform may be used. It will penetrate into every crevice and deposit a thin layer of the drug on every surface. But it is irritating to the eyes of the surgeon and his assistants, especially if it has been long kept.

The manner of opening the joint is very important. For a thorough exploration of the knee-joint a transverse incision is essential, and it must be supplemented by a perpendicular incision to open the synovial pouch, which extends upwards beneath the extensor cruris. The transverse incision may divide either the patella itself or the ligamentum patellæ; preferably the former, I think. A strong knife will cut a child's patella, but an adolescent or adult requires a saw. I prefer to divide the patella because (1) it can be so easily, certainly, and perfectly reunited; and (2, a minor and almost superfluous argument) the section shows accurately the condition of the centre of the bone. I doubt whether a sutured ligament is as strong and trustworthy as a sutured bone. Therefore one should, if possible, avoid dividing the lateral ligaments. When divided they should be carefully sutured at the conclusion of the operation. A short supplementary incision may be made anywhere, if required to expose

any otherwise inaccessible angle or crevice. In the West London Hospital, some years ago,* I introduced a new mode of opening the joint, applicable when it is not infected with tubercular disease—*e.g.*, when excision is to be done for injury or for orthopædic purposes, and particularly applicable as an exploratory incision in cases of injury to the knee-joint. It consists in a long perpendicular incision through the patella, ligamentum patellæ, and anterior wall of the upper synovial pouch. Ollier of Lyons had described and recommended this incision a few months before I did it; but, to the best of my belief, mine was the first case, and I was led to operate thus, certainly not by Ollier's paper, of which I had not then heard, but by the simple intention of obeying one of the first rules of the surgery of the limbs, which is always to prefer a longitudinal incision where it will suffice. The same operation has been recently and independently devised by Mr. Herbert Allingham. I would not, however, employ it for tuberculous disease; it does not, in my opinion, give sufficient view and access for operating thoroughly and minutely.

On the table is a specimen of a knee-joint which I explored in this manner. The condyles were merely bruised. There was a compound fracture just above but not into the joint, as the exploration showed. I drained it for a few days, and if the whole limb had done as well as the joint the specimen would not be here. But the lacerated tendons and skin sloughed so extensively throughout the popliteal space and calf that there was no hope of getting a useful leg, and grave risk of inability to keep aseptic the compound fracture. I therefore amputated the thigh, and the boy did well.

When a patella has been cut in two with a knife or saw, more care is required to fit the segments accurately together than after a fracture. In the latter case they interlock like the pieces of a puzzle. In the former they readily glide, tip, or gape. Catgut does very well for the suture, and in children it can be carried through the cartilaginous patella with a strong needle. When there is a prospect of a movable joint, cut aponeuroses should be united with buried catgut sutures. Cut ligaments should always be so treated. The crucial ligaments should be spared if possible, and they can be spared in most of the cases fitted for simple erasion.

Now as to drainage. Special tubes should be inserted into the superior synovial pouch. Generally the centre of the joint is best drained towards the side, the tube lying in a channel

* September 11th, 1883.

gouged for it in the surface of one or other condyle. A special lateral or postero-lateral opening may be made for it. This main tube should be large, especially if the joint has suppurated before operation. Indeed, in that case the tubes should all be large and permeate every part of the joint, and everywhere the abscess may have burrowed. Secondly, one should not be in a hurry to remove these tubes. A fortnight for a case which is aseptic is not too much. And when a case is septic the tubes should be kept in until the knee is either ankylosed or amputated, if it cannot be saved. Endless mischief is done by the eagerness of inexperienced people to withdraw drainage tubes.

With the use of sublimated wood-wool or turf-moss pads, and firm bandaging and strapping, aseptic cases will heal under one dressing, but a pedantic desire to obtain this is to be deprecated. If pain or a rise of temperature occur, and cannot be plainly referred to some obvious or removable cause, it is best to dress at once. Recurrent and secondary hæmorrhage used to be particularly frequent after excision of the knee. I always bandage the turf-moss or wood-wool pads very firmly down at the first dressing, and the next day relax any uncomfortable pressure by snipping with the scissors, afterwards stretching strips of strapping across any gaping interval. Sometimes, especially in children, I do not tie a single artery, but apply the dressings before having the Esmarch's band removed. Since I have used thick sublimated pads of turf-moss or wood-wool I have never been troubled with hæmorrhage. They should be bandaged on very firmly and evenly, and the limb kept much elevated for the first twenty-four hours. Some surgeons do not use Esmarch's bandage for fear of troublesome recurrent hæmorrhage after it. No such fear need be felt when the value of such a mode of dressing and elevating as that just described is properly appreciated. I have seen great, and even dangerous, shock after excision of the knee without the use of the bandage. The more I see of operative surgery, the more am I convinced that so-called shock is generally due almost entirely to loss of blood, or, at all events, that most of what is serious and dangerous in shock is due to hæmorrhage. Another cause of shock is a long operation and its necessary accompaniment, prolongation of the anæsthesia. With a bloodless limb, one can operate faster, and, at the same time, better.

One of the greatest essentials of after-treatment is perfect,

continuous, undisturbed fixation. Nothing secures this so well as plaster-of-Paris. But its universal use is very wasteful of the surgeon's time, which is no more an inexhaustible quantity in a civil hospital than on the field of battle. I have therefore sometimes put up fresh excisions with movable splints for the first fortnight, by which time the wound is usually almost healed and the discharge has ceased, so that a small, thin, antiseptic dressing suffices. Over this a plaster-of-Paris case fits much better and more effectively than over a large turf-moss or wood-wool pad. During the first fortnight a weight extension may be found comfortable and satisfactory after erasion. It would be out of place in excision cases on account of the wires with which the bones should always be fixed together. Many surgeons prefer nails or screws to wires. I do not think anything can be simpler or handier or more effective than wires. Two are required, one on each side. They can be either buried permanently or arranged for removal. In the latter case they should be left for two months. Perfect osseous ankylosis must not be reckoned on under several months after any form of operation, not even when plaster-of-Paris is used continuously.

If it is asked to whom all the alterations—improvements, I hope—above noticed are due, it becomes difficult to do justice to the West London Hospital and to others at the same time. Primarily, they are the logical outcome of a belief in antiseptic surgery, and of the application of a variety of means due to different inventors, not the least important being Esmarch's bandage, and the sublimated pads brought here from Germany. With regard to operative measures, incisions, modes of drainage, sutures, etc., I can honestly say that most of those I use I have worked out for myself, but I must add (1) that many are the same, or nearly the same, as have been lately described by French, German, and American surgeons; and (2) that I did not divide the patella transversely until I had seen a case of Mr. Golding-Bird's. He, I believe, had been anticipated by Volkmann, who got the start of all of us English surgeons in these matters, and who is, moreover, a genius. To Mosetig-Moorhof of Vienna, more than to anyone else, we owe the anti-tuberculous use of iodoform. I was using pure carbolic acid for the purpose when I heard of Mosetig-Moorhof's observations, and I had good results with it; but iodoform has obvious and great advantages over a drug so caustic. I used to entirely cover the dressing with elastic bandage before the turf-moss pads came over. While

house-surgeon in Birmingham, I learnt from Gamgee the value of pressure. Some British surgeons have also been working successfully with erasion, especially Wright of Manchester. If I needed anything to confirm my faith in the methods I have described, enough could be found in a recent paper by Professor Ollier of Lyons, the first authority in France on this subject, and second to none in Europe. The procedures he recommends are very similar to those in use at the West London.

Such, gentlemen, is a brief outline of what can be done, and what I believe ought to be done, in cases of chronic knee-joint disease fitted for operative treatment. It is but an outline. Each division of the subject would suffice for a complete paper, but I think you would now be more wearied than you are, had my address been devoted wholly to some single question, such as how to drain the knee after excision, or how to dress it after erasion. I would have liked to have described Annandale's operation for subluxation of the knee—which I have tried. It consists in suturing the too movable semilunar cartilage to the superjacent fascia lata and aponeurosis. Concerning simple drainage of the knee there is much to be said. Of suture of the fractured patella you must have heard and read *ad nauseam*. Amputation through the knee-joint is a subject of great interest, of which our fellow-member, Mr. Pick, has had exceptional experience. I will only say that I prefer Gritti's method to any other. Then there are many diseases commonly called of the knee, but really affecting neighbouring structures—*e.g.*, genu valgum, genu varum, and also contractures and paralyses. And what a valuable addition to the surgeon's means is MacEwen's osteotomy for genu valgum!

But time, which can bring even tuberculous processes to an end, must stop even this long and, I fear, wearisome address. I would like, in concluding, to ask you not to imagine, because I have spoken almost entirely of operations, that I recognise no other surgery of the knee-joint. Sea-air, rest, plaster-of-Paris, and more than one variety of splint are invaluable means which no reasonable person should underrate. But to-night I thought I could interest you more by talking about other things; that is all. It would ill become me to sit down without referring to my predecessors in the chair—to those who, not less than your election, have made it an honour to preside here. We are a semi-suburban society—the most successful and important suburban scientific society in the

world, I would venture to boast; and in what respect have we been more successful than in our past presidents? I have neither the learning nor classical culture of Dr. Vinen, not the wide knowledge of Dr. Thudichum combined with originality. Nor can I claim the natural dignity and charm of manner of Mr. Hemming, or the perfect common sense and experience of Mr. Lawrence. But I hope and believe that I do share with Dr. Alderson in feeling a most intense desire for the success of this society, and appreciation of the honour you have done me. Such feelings have been the guiding-star of my immediate predecessor. They have shone out as plainly and brightly as any lighthouse-lamp or beacon-fire, visible not only to our late captain himself, but to every one of his crew. And now the helm is handed over to me, I have but to remember the past year in order to carry in mind a chart for the future.

Ordinary Meeting, November 4th, 1887. Mr. C. B. Keetley, F.R.C.S., President, in the chair.

Mr. Percy Dunn exhibited:—1. The sac of a hæmatocele removed during life; 2. An epithelial growth from the tongue; 3. A kidney with calculi.

Dr. Herringham showed:—1. A case of optic neuritis with preservation of vision; 2. A case of syphilitic laryngitis; and 3. One of old facial paralysis.

Dr. Scanes Spicer read a paper on

OBSTRUCTION OF THE NOSE: ITS BEARING ON THROAT AND EAR DISEASE, AND ITS TREATMENT,

of which the following is the author's abstract:

The functions of the nose, and the results of the impairment of those functions, are little considered in works either on physiology, or on general medicine and surgery; hence the scant appreciation of the important part played by nasal obstruction in disease of the throat, ear, and respiratory tract especially.

Mr. Catlin, a layman, in his little book—"The Breath of Life"—insisted on the dangers of mouth breathing some years

ago, having proved his conclusions from comparative observations on the primitive American Indians and civilized Europeans. He, however, regarded mouth-breathing as simply a bad habit, and failed to recognise it as a necessary consequent of obstruction of the nose. Recent physiological experiments have proved that almost the whole of the warming, moistening, and filtering of the inspired air are done in the nose ; so that after nasal inspiration the air reaches the throat, ear, and respiratory tract in a purer, warmer, and blander condition than after mouth-respiration. These observations afford complete confirmation of the conclusions formed from clinical observation by rhinologists and laryngologists, as do the reflections that infants at birth always breathe through their noses, as well as all the higher vertebrates during normal quiet inspiration.

The symptoms of nasal obstruction vary in their completeness according to the site of the obstruction, its nature, and the period at which it supervened, whether during growth or after maturity. The symptoms and results may, for the purposes of this abstract, be best considered in a child the subject of neglected hypertrophy of the pharyngeal tonsil (post-nasal growth). The child has a vacant expression of countenance, looking dull and stupid ; the jaw drops, and the mouth is kept permanently open ; the alæ of the nose are collapsed ; a black vein is sometimes seen at the root under the skin ; the eyes are heavy ; the child makes a great noise while breathing and eating ; it speaks in a dull, dead tone of voice ; its speech is also thick and indistinct ; the sounds "m" and "n" are replaced by "b" and "d" ; there will often be chronic nasal catarrh and excoriation of the lip ; there is much snoring at night ; the child wakes struggling for breath, or in a fright ; it talks or walks in its sleep ; it has a dry mouth, and frequently calls out for water on awaking. The symptoms differ to some extent in adults, and are not so distressing, but many of them are present, and a source of constant irritability, annoyance, and feeble health. Their symptoms are perhaps more frequently sense of stoppage or stuffiness, headache, sneezing, shortness of breath, drowsiness, sleeplessness, sense of oppression and inability to direct the attention. But in addition to these they complain of constantly taking cold, of parched mouth, sleeplessness, unpleasant smell of breath and taste in the mouth: they have toothache, caries, and gum abscess, or enlarged tonsils, chronic and recurrent sore throat, granular pharynx, scraping and other unpleasant parestheriæ, hoarseness, loss of voice, distressing and irritating cough, and

all the other signs of pharyngitis, laryngitis, tracheitis and bronchitis so often predisposed to by nasal obstruction. In addition to the above the functions of the ears are often impaired, and deafness, giddiness, noises in the head, earache, diarrhœa, make the patient's life a worry to him, even if some fatal brain lesion does not ensue on the ear trouble.

The nasal channels may be blocked by foreign bodies; rhinoliths; crusts; parasites; cicatricial bands after ulceration; collapse of alæ from destruction of supports; acute turgescence of mucous membrane; hypertrophy of the mucous membrane; exostoses and enchondroses from the walls and septum; necroses; innocent and malignant polypi; adhesions of turbinated bodies to septum; deviations of septum, traumatic and otherwise; dislocation of triangular cartilage; gummata, abscesses and hematomata; acute post-nasal catarrh; post-nasal growths; nasopharyngeal polypi; adhesion of soft palate to pharynx; post-pharyngeal abscesses and cysts, and many other obstructions which cannot here be given in detail.

Whenever patients suffer from the above well-recognised group of symptoms of nasal obstruction, a thorough examination of the recesses of the nose and nasopharynx should be made with the aid of a good light, a speculum, probe and post-nasal mirror, to determine the condition of the meatuses; it is one of the most certain things in therapeutics that when the blocked channels are rendered patent, the annoying symptoms disappear, and the patients recover except in so far as actual destruction of organs or tissues has resulted. The treatment of many of the conditions above enumerated is sufficiently indicated by naming them; but chronic catarrh, which is such an important factor in the genesis of nasal obstruction, must always be subdued, and its recurrence combated to the utmost. With reference to operative procedures in the nasal cavities, it is a satisfaction to know that they may be rendered almost painless by the application of a 10 per cent. spray of cocaine hydrochlorate. By the cautious application of chromic-acid on suitable carriers, and galvano-caustic points to the site of hypertrophies, very much can be done; but with the galvanic and cold wire snare for polypi, and the electro-motor nasal trephine painlessly and effectually dealing with spurs and deflections of the septum, and with the various forceps and rings for removing post-nasal growths, nasal surgery can fairly claim to be in a very advanced state; and it is the conviction of the author that the restoration of the functions of the nose (especially in respiration and the ventila-

tion of the tympanum) is one of the most valuable procedures of medical art, and one whose results on the health and happiness of the human race it is difficult to over-estimate.

In the discussion that followed, the *President* remarked on the beneficial use of hazeline in congestive obstruction, as well as of hot water, and a cold foot-bath. He thought that it was not generally known that a deviated nasal septum is a common cause of nasal obstruction, and that the enlargement of one meatus does not usually compensate for the narrowing of the other.

Mr. Sheild observed that in an extensive experience of the removal of vegetative growths from the pharynx in children, he had found difficulty with the forceps, and also with the artificial finger-nail ; he now prefers the use of his own finger-nail, allowed to grow long for the purpose, followed by the application of sulphate of copper. He requested information as to Dr. Scanes Spicer's method of operating in these cases.

Mr. Roche Lynch related the case of a lady with a dry and hypertrophied tongue, which she had been recommended to have removed. It was, however, discovered in time that nasal obstruction existed on both sides, and that this was no doubt the cause of the changes in the mucous membrane of the mouth.

Dr. Thudichum referred to his own experience of over 3,000 cases, and stated that, having carefully scrutinized the American results, he had no hesitation in warning the Society against their acceptance. His own radical operations were undertaken solely to remove the disease itself. He regretted that Dr. Spicer had taken no notice of the work done in this country, much of which had been laid before this Society. He emphatically spoke against the use of chromic acid, Sir Andrew Clark's method, operations on the septum, etc., for the cure of reflex neuroses.

Dr. Ball considered that in certain cases escharotics answered well. Thus, in cases of stenosis from deviated septum, it was often sufficient to destroy the soft tissues on the inferior turbinate body, in the obstructed nostril, to restore the patency of the passage. For most cases he preferred the galvano-cautery to chromic acid. Cocaine is not to be recommended as a means of obviating nasal obstruction, for its effects are only temporary, and the ischæmia is soon followed by congestion and increased swelling.

Dr. Scanes Spicer, in reply, regretted that much of his paper,

on account of its length, had to be left unread, and therefore he had not been able to mention by name all those, who had advanced our art in the treatment of nasal obstruction, whether British or otherwise.

In answer to Mr. Sheild, he stated that he used Löwenberg's forceps as modified by Dr. Woakes—the finger cannot remove post-nasal growths in adults on account of their toughness.

Saws and gouges are, in his opinion, less delicate, and more painful, alarming and bloody in removing bony obstructions than the electro-motor trephine.

Chromic acid, when used, must be applied with great care to the exact spot to be reduced ; if properly employed no ill results ensue, except perhaps a little temporary catarrh.

He considered it unjustifiable to remove a bony growth which produced no symptoms.

He insisted again on the great use of cocaine in certain cases both in diagnosis and treatment.

Dr. Thudichum read a paper on

THE VARIETIES OF ACONITIN, AND THE DANGERS OF THEIR MEDICAL USE.

The author remarked how often drugs possessing healing properties have powers going far beyond. On account of progressive concentration, alarming effects may be produced, and a medicine become discredited. The different varieties of aconitin are due to its varying sources and differences in soil and climates. One variety is actually 40 times more poisonous than another. Even the so-called "English" aconitin is not always the same substance; one manufacturer may prepare it from *A. napellus*, another from *A. ferox*. The German aconitins are also of different strengths, and the French "*aconitine crystallisée*" is really a nitrate. With such variations it is surprising that fatal mistakes have not more often ensued. The author has compared the chemical properties of a large number of specimens of aconitin; and he finds that there are certainly three distinct substances known by the name, and very likely a fourth. They differ in their chemical reactions as well as in their poisonous power. On account of the danger of their use, he agrees with Professor Plugge that they should all be excluded from the Pharmacopœia. He considers that with aconitin paralysis of the sensory nerves is very slight and superficial, and that the motor nerves are more affected. He alluded to numerous experiments on rabbits, and especially remarked on the rapidity of the poisonous effects. In his opinion the best

treatment after a poisonous dose is the swallowing of charcoal and an emetic of sulphate of zinc.

In discussing the foregoing paper, *Dr. Pope* related the deleterious effects of five drops of *Tr. aconiti* administered in a case, and stated that since this experience he had given up the use of aconite.

Drs. Herringham, Owles, Alderson, and *Dodsworth*, on the other hand, considered aconite a real sedative, relieving pain that resisted all other drugs; the purity and uniformity of drugs being a matter of the utmost importance.

Dr. Thudichum shortly replied.

Ordinary Meeting, December 2nd, 1887. Mr. C. B. Keetley, F.R.C.S., President, in the chair.

Dr. Herringham exhibited a patient with muscular atrophy of the hand, which had been arrested by galvanism, and a case of rheumatic arthritis.

Dr. Savill also showed interesting cases of chronic rheumatism.

Mr. Wainewright showed a successful instance of suture of the patella.

Mr. H. P. Dunn showed some pathological specimens from the *post-mortem* room of the West London Hospital.

Mr. Benton made a few remarks on Oidtmann's injecto-purgative, which he had found very useful in several cases of constipation, especially as a preparatory treatment in rectal operations.

Mr. A. H. Middleton, M.D. Dub., F.R.C.S. Eng., read a paper on

THE ADVANTAGES OF VENESECTION OF THE EXTERNAL JUGULAR VEIN IN CARDIAC DISEASES.

He first pointed out the necessity of carefully considering the blood as regards its physical properties, and drew attention to the usual manner in which it was ignored in this respect in treating of heart diseases. He said it was just as necessary to bear the blood in mind as it was to consider the contents of the alimentary canal in treating intestinal maladies. By a series of physiological arguments he showed how the treatment he advocated acted in improving the patient's condition, and adduced the experiments of Lonsdale, Cormac, and Reid,

as well as those of Struthers, to prove the *rationale* of his treatment. He then shortly viewed the subject from its anatomical and surgical standpoints, and finally recited the experiences and results of three cases in which he had successfully adopted the proceeding.

Dr. Alderson said that he had himself bled a patient with heart disease and pneumonia, but from the arm, and he considered venesection in certain cases very useful.

Dr. Thorowgood had seen the beneficial effects of bleeding at the Victoria Park Hospital in several cases in which there was embarrassed action of the right heart; he had also employed venesection at the West London Hospital successfully for cerebral apoplexy. He considered the action a mechanical one—by removing the pressure.

Drs. Owles, *Pope*, *Parramore*, and *Mr. Benham* related cases, and their experiences of venesection in this connection, in which it had been employed with marked benefit.

Mr. R. W. Lloyd referred to a case in which tracheotomy had been performed on five occasions to relieve dyspnœa in heart disease; in the light of the facts brought forward by Mr. Middleton, no doubt the relief experienced by the operation was due to the accompanying hæmorrhage.

Mr. Middleton shortly replied.

Dr. Savill read a paper on the

TREATMENT OF RHEUMATISM AND RHEUMATOID ARTHRITIS.

The author took a peculiar interest in the disease, for he himself had been a martyr to it in its subacute form. He classified rheumatism into (1) acute, in which the temperature exceeded 102°; (2) the subacute, in which the temperature never reached 102°; and (3) the chronic form. He considered that the amount of fever and constitutional disturbance usually varied inversely as the age of the patient. *Chronic Rheumatism* had little if any fever or constitutional disturbance, and ran, as a rule, a remarkably protracted course without complications, and was mostly seen in advanced life. *Acute Rheumatism* differed from other forms in nothing so much as its amenability to treatment. In the salicylates of soda or potash (which were generally believed to be more convenient for use than either salicylic acid or salicin) we possessed remedies which seemed to have marvellous controlling powers over the acute form of the disease, in marked contrast with the effect upon other forms. There were still some who doubted the value of this medicine, and extensive statistics had been employed to settle the question. But he thought that the

treatment of acute rheumatism by the salicylates of soda and potash the best yet devised ; and contrasted the old cases as described by Dr. Fuller twenty-five years ago—the majority of which lasted four or five weeks and upwards—with the experiences of the present day. Salicylate, properly used, now made the temperature go down in a few days, and in nearly every case the patient was quite cured within the month. He had seen no evidence that visceral complications were more frequent under the treatment. The failure of the drug may be due to three things: (1) Unsuitability of the cases, *e.g.*, when renal disease was present ; (2) the mode of administration—large doses being requisite ; and (3) errors of diagnosis—gout and septicæmia having been mistaken for rheumatism. He recommended graduated baths for high temperature. In one case everything failed to relieve the pains but hypodermic injections of morphia ; and dry and hot cotton-wool often gives relief. In the subacute and chronic forms many remedies had he tried, but none could he much believe in. Saline purgatives and diuretics may be useful. Sometimes Scott's dressing and other applications, care in diet, avoidance of alcohol and sugar, warm clothing, a course of Turkish baths and massage—especially for muscular rheumatism—change of climate, mineral baths—the chief of which he enumerated—and particularly pure sea air, as on a voyage, for inducing metabolic change.

Dr. Alderson read a paper on

THE SAFE DOSE OF THE SALICYLATES,*

of which the following is the author's abstract :

The official dose of salicylate acid or salicylate of soda is 5 to 30 grains ; B.P., 85. Martindale, in his extra Pharmacopœia, gives "5 to 30 grains *or more*." Whitton, in his recent work on Pharmacy, Materia Medica, and Therapeutics, gives for the dose of salicylic acid, 30 grains in ʒss. of water, every two hours, for three, four, or six doses, as the severity of the pain or the height of the fever may indicate, and adds subsequently, that pain or fever will return if it be withheld, and yield again on its administration.

Dr. Alderson narrated an interesting case of acute rheumatism in a young lady which he had treated with salicylic acid, and had successfully reduced the hyperpyrexia from 107° to 104°, by five or six scruple doses of the salicylate of soda, given every three or four hours, and subsequently to 102° by its

* This paper is published in full in the *Medical Press and Circular*, December, 1887 ; and also in the *Pacific Medical Journal*, January, 1888.

continuance at longer intervals; at the urgent request of the patient, on account of the buzzing in the ears and slight deafness it produced, after three or four days the salicylate was discontinued, an effervescent mixture of citrate of potash ℈ ℥v. dose Vini Colchici being substituted. On the second day following this alteration the hyperpyrexia suddenly returned, and was not again reduced by returning to the scruple doses of the salicylate, and death from pericarditis occurred twelve hours after the relapse.

Dr. Alderson called attention to a letter published in the *Lancet* of Dec. 18th, 1886, by Mr. Freeman, on "a case illustrating the need of caution in the use of salicylic acid," and where death followed after only three 15 grain doses of the acid; still to him it did not appear that the death was in anywise caused or hastened by the salicylic acid, and that the death was unexpected, the patient comatose, and the urine slightly albuminous, were, he thought, insufficient reasons, the *post hoc* and not the *propter hoc*, more especially as there had been noticed previous cerebral symptoms.*

Dr. Alderson then gave the details of what he considered a most important case published in the *British Medical Journal* of Feb. 5th, 1887, by Mr. Luff, a house-physician of St. Mary's Hospital, as one of "poisoning by salicylic acid." The patient had been admitted into St. Mary's Hospital under Sir Edward Sieveking, and even here the evidence of toxic symptoms are of the slightest, the patient quickly recovering without any special treatment beyond the discontinuance of the salicylic acid. The salicylic acid was detected in her urine (as it generally may be after one or two medicinal doses), and although a double dose had been taken by some mistake, it did not even then exceed the full medicinal dose of 30 grains. With the exception of the contracted pupils the symptoms were perhaps little beyond the physiological and not the toxic effects of the salicylate, for there was no coma, no insensibility. The patient was able to describe her symptoms; no difficulty of respiration, no alteration of the colour of the urine, and an entire absence of the graver toxic effects of the drug, such as delirium, visional hallucinations, dyspnœa, and cardiac failure.

In concluding, Dr. Alderson asked for the experiences of the members as to the safety of prescribing this medicine; he

* It was suggested in the discussion that this death was due to uræmia, but the urine had been tested, and was normal, and there never was any symptom of kidney mischief.

did perhaps think the officinal dose of 30 grains too large, and that the dose is ordered to be repeated too frequently; still, his own experience led him to believe 10 or 15 grains of salicylate of soda given at intervals of four hours, when there was no kidney disease, a safe remedy; and that there may have been needless alarm and apprehension as to the serious, although not toxic, symptoms that have not infrequently followed the prescribing of this useful medicine.

In the discussion upon these two papers,

The *President* said he had seen the useful effects of buckets of cold water heroically thrown over a patient with a very high temperature. He asked whether anti-pyrin had been employed to relieve rheumatic pain; he had used it successfully for the pain of cancer, and in other cases. He referred to the fact that injury to a joint was frequently the starting-point of rheumatoid arthritis.

Dr. Owles remembered that formerly cases under Dr. Fuller's alkaline treatment were very nearly as soon cured as nowadays with salicylates. On the whole, however, he preferred the modern method. He found, in one case, that two or three applications of the wet pack cured the patient.

Dr. Parramore, in a case which seemed moribund with a temperature of 110°, removed the bed-clothes, opened the windows, and applied cold water, with the effect that in two hours the temperature became nearly normal, and the case did well. He doubted whether the salicylates were constipating, but, on the contrary, thought that they had acted on the liver, and in this way were beneficial in rheumatism.

Dr. Scanes Spicer wished to know in what percentage of Dr. Savill's cases of rheumatism he had found tonsillitis to occur. Did Dr. Savill consider tonsillitis to be an effect of the rheumatic poison circulating in the blood and irritating the fibrous tissue of the tonsils? or did he regard the tonsillitis as an irritation of the adenoid follicles of the spongy tonsils from their attempts to reabsorb the salivary secretions surcharged with the rheumatic poison? Dr. Savill's numerous cases might throw some light on this, as yet, little understood connection. He suggested that Erb's remark on the presence of the salts of the sea (chlorides, iodides, etc.) in the form of a perpetual spray, might partly explain the undoubted benefit of a sea voyage in many cases of chronic rheumatism.

After a few remarks by *Mr. Benham*, *Dr. Archer*, *Dr. Clippingdale*, and *Mr. Lloyd*, *Dr. Alderson* and *Dr. Savill*

replied, and the Society adjourned to the first Friday in January.

Ordinary Meeting, January 6th, 1888. Mr. C. B. Keetley, F.R.C.S., President, in the chair.

EXCISION OF RECTUM.

Mr. Whitmore exhibited a male patient from whom he had excised a portion of the rectum. E. N., æt. 41, came complaining of "piles," in May, 1887. Malignant disease was found one and a half inches up from the anus, infiltrating the circumference, particularly the anterior part. The growth was excised by écraseur, care being taken to dissect and scrape away adhesions. It was unnecessary to tie any vessel. The patient was up in four weeks, and resumed his work in thirteen weeks. He has control over ordinary motions, and has gained fourteen pounds in weight. The specimen was presented to the Society, and microscopic sections of the growth were shown by **Dr. P. S. Abraham**, who remarked that the characters were decidedly malignant, the growth being well-marked cylindrical epithelioma, with evidence of rapid multiplication in the cells.

Mr. H. P. Dunn showed some pathological specimens from the post-mortem room of the West London Hospital.

Mr. Keetley showed a case of recent complete division of the ulnar nerve by a piece of glass. He intended to suture the divided ends, and he hoped to exhibit the patient again, after operation.

SYPHILITIC DISEASE OF THE EYE.

Mr. J. Hutchinson, junr., showed two cases of syphilitic disease of the eyes, presenting unusual symptoms. The first, that of a woman who had lately suffered from severe tertiary symptoms, came under his care for ulceration of the upper eye-lid, with surrounding thickening. A small gumma sloughed out, and on the conjunctival surface a second ulcer appeared. With iodide of potassium internally, and iodoform locally, the ulcer healed, and at the same time a gummatous ulcer on the palate cicatrised. In the second case, a girl, æt. 17, with inherited syphilis and typical teeth, there had been double iritis, and while under treatment interstitial keratitis appeared in both corneæ. Two small gummata developed in the inflamed iris, and had become absorbed

under mercurial inunction. Since then the iritis and keratitis had relapsed, but were disappearing with specific treatment and tonics. He remarked on the rarity of gummata of the iris and conjunctiva.

Dr. Marsden Low, *Mr. Whitmore*, *Dr. Bennett*, *Mr. Lloyd*, and *Dr. Alderson* made remarks, and *Mr. Hutchinson* replied.

The following patients from whom laryngeal growths had been removed in St. Mary's Hospital were shown by **Dr. Scanes Spicer** :

I. James H., aged 22, paper-maker, had in the course of his vocation, since the age of 13, been exposed to an atmosphere laden with steam, and damp under foot.

He had nasal obstruction, due to septal spurs, and polypoid hypertrophy of mucous membrane, especially of inferior turbinated bodies, and the passages were frequently quite blocked ; he had most of the symptoms of an aggravated mouth-breather. There was hypertrophy of the lingual tonsil, and post-nasal pharyngorrhœa. He had also been an excessive, and probably perverted (for he had never been taught), voice-user, as a boy, singing treble in a country choir, until his voice broke. Later he used to sing tenor parts, but had to give this up on account of his voice "cracking," and his being unable to "pitch a note with certainty." He then took to teaching a large class at a night-school, when his voice was uncertain in pitch, at times piping, at others husky and deep, and it changed two or three times in every sentence.

The original growth was a large subglottic papilloma attached to the anterior third of the under surface of the right cord. It was removed with Stoerk's tube-forceps, and the base cauterised twice at intervals of a few days. The nasal spurs were removed with the electric trephine, and the soft hypertrophies with the cold wire snare and the galvano-caustic point. The patient then had to leave the Hospital, but returned in two months with his symptoms and laryngeal growth as bad as ever. He had found great difficulty in getting rid of his habit of mouth-breathing, although the nose was now quite clear, and had continued his employment as paper-maker against advice. The growth was removed as before with complete relief of all symptoms, except that the voice was somewhat rough.

Three months later he appeared again with recurrence of growth on original site, and several fresh small growths attached to both ventricular bands were seen, and one on the under surface of the epiglottis. The growths are now being extirpated for the third time, and his only symptom is huskiness of

voice. There are no physical signs of tuberculosis, and no history of syphilis. The points of interest in the case are (1) the concurrence of several of the alleged etiological factors in the production of growths, (2) severe nasal obstruction, (3) rapid recurrence and growth of tumours, and (4) the impracticability of ensuring thorough destruction of the base of the infraglottic portion. These considerations render the prognosis of recovery of the voice very bad.

II. Alice L., aged 8, school-girl, lost her voice during an attack of measles nine months ago, and has never recovered it. The whole length of her right vocal cord (upper surface and inner margin) was covered with sessile warty growths. She was placed under chloroform in a nurse's lap, the tongue held out by an assistant, the throat sprayed with a 10 per cent. solution of cocaine, and the growth removed with the aid of the laryngoscope and Mackenzie's lateral cutting forceps on two different occasions. Her restoration of voice and larynx to health was perfect, and there has been no sign of recurrence for months. A curious point was, she had a small papilloma on her lip. She was also a mouth-breather; her nasal obstruction being due to hypertrophy of the pharyngeal tonsil, which was reduced by digital scraping.

III. Sarah H., aged 58, presented herself at St. Mary's Hospital on the advice of Dr. R. D. Gwillim. On admission she was in an alarming state of dyspnœa, cyanosis and asthenia which improved in a steam tent, etc. A history of increasing aphonia and dyspnœa during the previous three years was subsequently obtained.

She was sent to the Throat Department, after being some days in hospital, and was found to have a large tumour, of the size of a moderate cob-nut, moving up and down with the current in glottis, and many smaller growths projecting from sites which could not be determined accurately into the lumen. Most of the new growths were removed at one sitting, under cocaine spray, with Mackenzie's lateral cutting forceps, but some were seen to be left. She experienced the greatest relief, and would not consent to completion of operation then, but promised to return in six weeks from Portsmouth. This she did, when no trace of growth was to be seen, all the smaller inflammatory proliferations having revealed their true nature and disappeared.

At the present time (three months from operation) her larynx is normal, her voice loud and clear, and she has gained a stone and a half in weight.

She has been conscious of nasal obstruction for years, and

it has been at times complete on the left side, where there were large polypoid hypertrophies from inferior turbinated body, quite occluding the inferior meatus. These were removed with galvano-caustic snare, and the hypertrophy of the right inferior turbinated reduced by insertion of the galvano-caustic point at several places. The nasal obstruction and forced mouth-breathing were the only predisposing causes that could be found to account for the development of the laryngeal tumour.

The patients were shown, and their larynges demonstrated with the electric laryngoscope of Mr. H. Schall, of 55, Wigmore Street; the growths removed, as well as histological sections of them, were on view.

Dr. Scanes Spicer also showed the electro-motor trephine, above referred to, for removing bony and cartilaginous spurs from the nasal fossæ. The trephine was like that of Curtis, but worked with less friction, owing to the barrel being made of a less circumference externally at the fixed than at the free extremity. The advantages of this instrument over nasal saws were pointed out to be the extreme delicacy and quickness, as well as safety, with which any obstruction could be removed, and the avoidance of that frantic alarm inseparable from sawing the nose, or from seeing an assistant struggling with the crank of a foot-engine trephine. The motor and battery were made by Mr. Schall, and were stated by Dr. Scanes Spicer to have given him great satisfaction.

Dr. Abraham exhibited microscopic sections of epithelioma of the larynx, which had been removed by Mr. Keetley, and remarked upon their characters.

Ordinary Meeting, held February 3rd, 1888. Mr. C. B. Keetley, F.R.C.S., President, in the chair.

Mr. Hurry Fenwick exhibited an electric apparatus, the cystoscope, for illuminating and examining the bladder.*

Dr. Herringham showed a patient with peripheral neuritis, viz., localized paralysis with anæsthesia, which was yielding to galvanic treatment.

Dr. Parramore read a paper on insomnia, in which he

* This instrument is fully described and illustrated by Mr. Fenwick in the *British Medical Journal*, February 4, 1888.

discussed the various causes, and classified the various methods of treatment.

The President remarked on the advantages of fresh air, and the regularity of habits in sleeplessness.

Dr. Pope recommended urethane in cases where sleeplessness is caused by a succession of thoughts.

Dr. Parramore, in his reply, deprecated the indiscriminate use of drugs in the treatment of insomnia.

SYPHILITIC DISEASE OF LIVER AND SPLEEN.

Mr. J. Hutchinson, jun., read a paper on syphilitic disease of the liver and spleen, pointing out how frequently these viscera were affected together in tertiary syphilis, and adduced arguments in support of the theory that during the secondary stage also they are often involved. Several cases, both of the acquired and inherited disease, were narrated, in which the liver and spleen became uniformly and extremely enlarged, and the pathology of this form of visceral syphilis—a diffuse interstitial inflammation—was illustrated. It was pointed out how much these cases resembled lardaceous disease, and suggested that the two conditions were not infrequently present together. The much slighter but definite enlargement of the liver and spleen during the secondary stage was noticed, and the belief expressed that these changes were connected with the anæmia, jaundice, and other symptoms often present. In a newly-born infant (congenitally syphilitic) the liver was found to be greatly enlarged, congested, and affected with a diffuse cellular infiltration, without obvious gummata.

Some cases illustrating the great difficulty in diagnosis of syphilitic hepatitis and enlargement of the spleen were narrated, and it was urged that in all doubtful ones the patient should have the benefit of a trial of specific treatment. The works of Dr. Thomas Barlow, Dr. Isambard Owen, Mr. Charters Symonds, and others, were quoted from in illustration of the writer's views.—*Author's Abstract.*

In relation to the above paper, **Mr. Percy Dunn** exhibited a specimen of gumma of the liver in which no syphilitic disease had been suspected during life, and made some remarks in connection therewith.

Mr. Marmaduke Sheild had seen similar cases with enlargement of liver in secondary syphilis. Gummata in organs had often been confounded with actino-mycosis, and other de-

posits, even in museums. He endorsed Mr. Hutchinson's remarks on the unreliability of patients' statements regarding syphilis.

Dr. Owles doubted the fact of the iodides and mercury doing good in proved cases of syphilis, as they destroyed the micro-organisms of other diseases.

Dr. Clippingdale asked whether the drugs or the accompanying hygienic treatment cured the complaint.

Dr. Parramore and the *President* having spoken on the subject, *Mr. Hutchinson* replied.

Ordinary Meeting, held March 2nd, 1888. Mr. C. B. Keetley, F.R.C.S., President, in the chair.

DEMONSTRATION OF MASSAGE,

by **Dr. Symons Eccles,** who has contributed the following report:

The demonstration was given at the commencement of the proceedings, and in view of the important papers to be read at this meeting, the demonstrator said that he would only attempt to perform the ordinary manipulations included under the term "general massage," omitting the special movements such as were employed in the treatment of certain affections of the eye, joints and abdomen, in which mechanical methods had been found useful.

The various manipulations included under the terms *friction*, *kneading* and *hacking*—or, as they were designated by Continental authorities, "effleurage," "petrissage," and "tapotement" respectively—were demonstrated on the limbs and trunk of a subject, one of a number of persons on whom the operator was at the time engaged in carrying out a series of investigations on the effects of the process in relation to the external and internal temperature of the human body. Skin friction, at first lightly, and gradually with increasing firmness, was practised, the firmer upward strokes being made always in the direction of the lymph and blood current from the periphery towards the centre; the effects of increased vascularity and temperature with stimulation of the cutaneous sensory nerves, and the more remote consequences of such stimulation, being briefly alluded to during the process.

Kneading and rolling of the skin upon the muscles, and the deeper kneading of the muscles themselves, were then carried out, the almost constant application of the "heel of the hand" in the performance of these manipulations being insisted on as necessary in the systematic practice of *muscle-kneading*, which consisted in grasping the muscles either separately or in groups according to their anatomical distribution, drawing them away, as it were, from the osseous plane on which they rested, and centripetally squeezing them so as to express as far as possible the lymph from the tissues, to favour the return of venous blood to the heart, and thus endeavour to assist the interchange between the blood and the tissues through which it circulated with greater freedom after the mechanical unloading of the lymph-spaces, lymph, and blood-vessels, which was the object of the manipulations, differing in their application according to locality, but grouped for convenience under the general term kneading.

Both hands were employed equally in carrying out the process, the unusual development of certain muscles in the hands of the demonstrator being alluded to as a test he found useful when considering the claims of many persons who sought employment as "certificated masseurs and masseuses."

The process of *hacking*, consisting in a series of rapid blows with the ulnar edge of the hands and with the semiflexed dorsal surface of the fingers delivered over the larger muscular masses of the trunk and limbs generally in a direction transverse to the direction of the muscular fibres, concluded the series of manipulations, the time at disposal not allowing more detailed or complicated movements to be practised.

In reply to various inquiries, the demonstrator stated that in addition to the mechanical effect of increasing the local blood-supply to the part under manipulation, there were evidences of a marked action on the nervous system through the mechanical stimulation of the sensory nerves, as shown by the variation in the pulse-rate, the occurrence of increased temperature and perspiration in the opposite limb to the one under treatment, the after-sensation of repose generally experienced, and the sense of appetite which frequently followed the employment of general massage.

The cases in which he personally had employed massage either alone, as part of the "Weir Mitchell treatment," or combined with rest and certain position of limbs (as in cases of sciatic and other local forms of neuritis), or again with rest and the constant or interrupted current without the rigid

seclusion of the "Weir Mitchell" method, included various conditions of the nervous system commonly classed as "nutritional disturbances of the spinal cord" in which the symptoms were so anomalous that a diagnosis based on pathological research could not be made, but which were none the less true conditions of disease and not to be confounded with so-called hysteria, local muscle-wasting after paralysis, sciatica, chronic sciatic neuritis, similar conditions of other nerves, and peripheral facial paralysis.

Another group of cases were those in which general wasting had occurred after fevers, diabetes (not in young subjects), after operations, and with doubtful success but with an appreciable gain of weight in incipient phthisis. Anæmia, both with wasting and obesity, chronic dyspepsia, tropical diarrhœa, sprue and dysentery had been successfully treated by general and abdominal massage with appropriate dieting.

Chronic rheumatic affections of muscles and joints yielded excellent results when the manipulations were judiciously carried out, much of the success attending so called "bone-setting," being, he had reason to know, greatly attributable to the attenuation of adhesions and the gradual dispersion of inspissated lymph by kneading the parts affected.

Morphia habit and the abuse of other drugs had been treated in some cases successfully, but the number of persons so benefited was not as yet sufficient to warrant an emphatic statement, though at no distant date it was hoped that a fair number of successes could be recorded.

In sleeplessness which had not yielded to ordinary means the demonstrator had found massage a most valuable therapeutic agent; indeed, of the cases in which he had employed it none had proved failures, though the loss of sleep had depended on very varied conditions.

In conclusion, it afforded him very great pleasure to show the members of the Society the comparatively simple movements included under the general term massage, the physiological effects of which he had endeavoured to learn, and was still investigating, with a view to discover the extent to which these mechanical methods might be employed in the treatment of disease, how far their practice might be intrusted to properly trained intelligent laymen, and where it was necessary for the physician himself to apply the manipulations. It appeared to him, as he daily learned more of the immediate and remote effects of systematic kneading, that serious mischief must and did necessarily follow the indiscriminate use and careless

administration of what was assuredly a powerful therapeutical process ; none the less unfortunate for the due appreciation of its value was the rapidity with which a certain class of persons were certifying themselves as qualified to practise massage, much in the same way as some social failures imagined that they were qualified to amuse the public and announced themselves as actors. Fortunately in the latter case acting managers as a rule succeeded in preventing the public from being wearied and disgusted by ignorant performers. He held it to be the duty of medical men to prevent as far as possible the inevitable disrepute into which massage would speedily fall if, as was the case at present, "magnetic masseurs" and "certificated masseuses," who were armed with testimonials from kind-hearted persons, were employed by members of the medical profession to manipulate patients under their care, with the result of failure and disappointment following the ignorant or slovenly attempts at pseudo-massage.

SARCOMA OF VERTEBRÆ.

Mr. J. Roche Lynch exhibited a specimen of alveolar sarcoma of the vertebræ taken from a lady, one of three sisters, who all died within twelve months of malignant disease. In the other two the growths commenced in the mamma. In this case the symptoms were persistent lumbago, followed by rigidity of the spine, and a week previous to death right unilateral convulsions. The duration of the disease was eight months.

On post-mortem examination, the vertebral bodies from the sixth dorsal to the sacral were found impregnated with the growth. The bodies and intervertebral substances were quite soft, and completely occupied by the new substance, while only a thin shell of compact bone remained at the margins ; there was no out-growth, thickening, or deformity, consequently to the eye the whole column appeared normal on exposure. The transverse processes and the spines were in a natural state, and thus the weight of the column was sustained. The spinal cord and its membranes were free from disease, but contained an unusual quantity of fluid. There was also a considerable quantity in the brain, but no secondary deposit. The liver showed many small patches of commencing disease. The microscopic examination indicated alveolar sarcoma. It was not a mere infiltration, but a substitution of cancer for bone.

It may be interesting to note that I have searched the literature on the subject in the library of the Royal College of

Surgeons, but have failed to find any record of primary cancer of the vertebræ. Mr. Cæsar Hawkins, in 1841, states he was acquainted with only five cases of malignant disease of the spine—two were cases of Sir Benjamin Brodie—but in every instance it was a secondary growth. Mr. Curgenven, in 1862, relates a case of the three lower lumbar vertebra, but this, too, was secondary to cancer of the breast. It is evident such a condition must be very rare.

At the suggestion of the *President* the discussion on Mr. Lynch's interesting specimen was postponed till the following meeting (see p. 121).

OÖPHORECTOMY FOR UTERINE FIBROID.

Mr. John R. Lunn read a paper on a successful case of oöphorectomy for a bleeding fibroid of the uterus. On opening the peritoneum the left ovary and the uterus presented. Several small fibroids were seen springing from the fundus. The left ovary was cystic, and as large as an orange. It was pulled out of the abdomen and ligatured, together with the fimbriated extremity of the tube, with carbolized China silk (previously boiled for twenty-four hours). The abdominal opening was then enlarged and the right ovary searched for. It was behind the uterus, and very adherent to the surrounding tissues. It was carefully torn away, ligatured, and removed, the uterus being previously pulled out of the abdomen. The uterus was well washed with carbolic lotion and returned; the pelvic cavity was well irrigated and slightly sponged. The abdominal incision was then closed with carbolized silk, and dressed with iodoform and dry iodoform lint. Recovery was complete, and five months and a half after the operation the uterus only reached midway between the pelvis and the umbilicus, and the patient had gained 20 lbs. in weight.

THE APPLICATION OF ELECTRICITY TO UTERINE FIBROMATA.

Dr. Inglis Parsons read a paper on this subject, and has since supplied the following abstract:

The great advance made in modern times in applying electricity for this purpose is due, in the first place, to the use of the galvanometer, by which an accurate dose can be given; and, in the second place, to the use of large external electrodes, by which the density of the current externally is much reduced, while it is concentrated internally on the comparatively small electrode in contact with the fibroid. The necessity for the use of a galvanometer, if we wish to apply regular doses of

equal strength, can be better appreciated if it be borne in mind that the resistance of one patient is sometimes twice that of another; as a consequence, the number of cells used gives quite an erroneous estimate of the amount of electricity passing through the circuit. With a galvanometer, a glance at once shows, not only the amount of electricity, but also any variations that take place from time to time. The advantage of a large external electrode can easily be seen. Suppose a current strength of 100 milliampères to be in circuit, and an electrode of one square inch surface be used, the whole of the current passes through that surface; but if an electrode having an area of twenty square inches be substituted, the amount of current passing through each square inch will only amount to five milliampères. The result is that the patient experiences but little discomfort when it is thus diffused, and currents of much greater power can thus be used without causing damage to the skin. The most convenient battery for use in the consulting-room is Stohrer's. It has a high electromotive force, is very simple in construction, and with a little practice can be recharged without having to be sent to the makers. As the cells are open the fluid is easily spilt, and so it is not so convenient for carrying about as a Laclanché. Apostoli uses clay for his external electrode. It answers the purpose admirably, but is very messy, and gives a good deal of trouble. I find that a large copper electrode, placed over a thick piece of felt or several layers of linen, answers the purpose almost as well. On the Continent the dorsal position is used, but it appears to be quite unnecessary. The exposure of the patient and the shock to her modesty are strong objections. The lateral position answers equally well. The following case illustrates the benefit to be derived from the treatment. F. G., aged 45, has suffered from excessive hæmorrhage and occasional floodings, that have been dangerous to her life for the past two years. Examination showed the presence of a small fibroid on the posterior wall. A similar diagnosis was also made by Dr. Godson when she was at St. Bartholomew's, and by Dr. Holland, of the Soho Hospital. Five applications of the current have been made, the positive pole internally, with from 160 to 200 milliampères; the first on 19th October, 1887, and the last on 16th November, 1887. She is now regular, and menstruation is normal.

In the discussion following these papers,

The *President* congratulated Mr. Lunn upon his skilful operation, and referred to the warmth of feeling often

exhibited in discussions upon the therapeutic uses of electricity.

Mr. Alban Doran considered that almost any of the older forms of treatment would temporarily decrease a fibroid. Formerly the action of ergotin, subcutaneously administered or otherwise, had been much lauded, similarly with other methods. He doubted whether the diminution of the growth by means of electrolysis would be permanent. Most of the cases thus treated had not yet been sufficiently long under observation.

Mr. Knowsley Thornton thought we should wait before accepting Mr. Keith's views on the matter. There were rumours of some cases having ended fatally—he himself knew of one. Certain uterine growths disappeared after oöphorectomy; he considered, however, that it should not be practised when the uterine fibroma was larger than a cocoa-nut. The rapidity of disappearance of small or soft myomata after removal of the ovaries was extraordinary. He had operated on twenty-eight cases and had lost two. Of the others, all but one had been completely successful, the uterus being left in the same condition.

Dr. Grailey Hewitt agreed with Mr. Thornton in his remarks regarding electrolysis: we really knew, as yet, very little about it. He could conceive danger when the tumour was punctured in the process, otherwise he thought the method would be harmless, and that it might be tried in certain cases.

Dr. Lewers considered that if electrolysis were a remedy of such power in interstitial fibroids, it should be efficacious in the removal of polypi. The value of the method could thus be tested by direct evidence, for there was often doubt as to the presence of an interstitial fibroid.

Dr. Alderson believed in spontaneous cure. He asked whether some of the cases did not die of exhaustive diseases, such as pernicious anæmia. He was under the impression that he knew of one such case.

Dr. Travers thought that electrolysis should be given a fair trial. If there really had been fatal cases it was likely that we should have heard more about them than mere rumours.

Mr. Lunn, replying, said he considered that unsuccessful cases should be more frequently published.

Dr. Parsons also replied.*

* In connection with the above discussion, the following correspondence subsequently appeared in the *British Medical Journal:*

(1) *March 17th*, 1888.

"To the Editor of the *British Medical Journal.*

"Sir,—Mr. Knowsley Thornton, at the meeting of the West London

Ordinary Meeting, held April 6th, 1888. Mr. C. B. Keetley, President, in the chair.

PATHOLOGICAL SPECIMENS :—**Mr. John R. Lunn** : Cancer of the œsophagus.

Mr. Percy Dunn : (1) Cyst of ovary; (2) Nævoid condition of brain; (3) Sarcoma of uterus; (4) Liver from a case of peritonitis following perforation in typhoid.

Medico-Chirurgical Society on March 2nd, stated that he knew of one case of uterine fibroid treated by electricity having ended fatally. When asked to state the case it was found that he had gone, and so I take this opportunity of asking him to give a few of the facts in connection with it, so that those who are now trying electricity may profit by the example.

"I am, etc.,

"J. INGLIS PARSONS.

"9, Collingham Place, South Kensington."

(2) "*March 24th*, 1888.

"TO THE EDITOR OF THE *British Medical Journal*.

"SIR,—I did not intend to take part in the discussion on the so-called 'Apostoli method' of treating diseases of the uterus (including fibro-myoma), because I have never tried it, and, being a surgeon, do not intend to, as I think it may more properly be left to the obstetric physician. A very brief and misleading report of the remarks I made in a discussion at the meeting of the West London Medico-Chirurgical Society on March 2nd seems, however, to necessitate some exposition of my real views on this subject.

"1. I think the whole discussion premature, because we know that fibro-myomata are most uncertain in their habits of growth and retrogression when left entirely to themselves, the most surprising alterations taking place in periods of three, six, or twelve months. Such alterations are still more common if the patients are carefully handled as to diet, alcohol, rest at the periods, and special medicines.

"2. Nothing which has yet been published by Apostoli or his followers is inconsistent with these natural, or slightly aided, changes, and the results obtained are probably as much due to the rest and care while under treatment, powerfully aided by the effect on the nervous system of confident hope of cure, as to the specific action of electricity.

"3. No results can have any scientific value till the cure is proved by a sufficient interval of health for at least twelve months after the treatment has ceased.

"4. We do not yet fully appreciate the dangers of the method. I know of one case in which rapid fatal pyæmia followed a very few applications in the hands of one experienced in the use of the method. The journals tell us of narrow escapes, and even such careful manipulators as the Keiths record a serious case of cellulitis, of which the gravity is not lessened by attributing it to the carelessness of the patient.

"5. I would ask the profession not to be carried away by the enthusiasm of anyone in a *revival* of this kind, but to wait patiently for definite results, confirmed by sufficiently long intervals.

CANCER OF THE BODIES OF THE VERTEBRÆ.

Mr. Roche Lynch again produced his specimen of cancer or sarcoma of the lumbar vertebræ, which he described at the last meeting (*vide* p. 116).

In the adjourned discussion the *President* observed that he had seen a case of secondary cancer of the vertebræ in which the symptoms had been mistaken for those of hysteria.

Mr. Lloyd had seen a specimen of melanotic sarcoma of the spine. The peculiarity of Mr. Lynch's specimen was that it appeared to be a unique specimen of primary cancer of the vertebræ.

RARE CONGENITAL DEFORMITY OF THE HANDS.

Mr. Percy Potter showed a man in whom the metacarpal bones were so fused that each hand had the appearance of having but two digits and a thumb.

The *President*, *Mr. Allingham*, *Mr. Benham*, and *Dr. Manning* took part in the discussion which followed.

DERMOID CYST EXPELLED PER RECTUM DURING LABOUR.

Mr. Prior Mallam related this case and exhibited the specimen. A woman who had had two natural confinements previously was taken in labour, and found to have in the recto-vaginal septum a tumour large enough to obstruct the descent of the child's head. In delivering with forceps the tumour was forced out through the anus. It was found to contain serous fluid and some hair. The patient recovered without any bad symptoms.

The case was discussed by *Dr. Wells*, *Mr. Dunn*, and the *President*.

PERFORATION OF THE EYEBALL BY THE KNOT OF A WHIP.

Mr. Percy Dunn related the case of an attendant at a hippodrome who felt his eye suddenly cut with, as he supposed, a

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"Let those who believe in the new 'panacea' work for a year or two, and then show us their cured patients, *i.e.*, if they then have any to show.

"The above was intended for last week's *Journal*, but was mislaid. It contains all the information I can give Dr. Inglis Parsons, as the details of the fatal case were given to me by the family medical attendant of the patient. I trust that the profession will in due time have the full particulars from the operator.

"I am, etc.,

"J. KNOWSLEY THORNTON.

"22, Portman Street, W., *March 20th*, 1888."

pebble kicked up by one of the ponies, which was being trained. The patient was shortly afterwards seen by Dr. Sanctuary, the medical officer of the company, and also by Dr. Towers Smith, and on their advice was sent to the West London Hospital on the following day. When admitted there was severe panophthalmitis. The man, however, despite the pain he was suffering, refused to be operated on until the following day, when Mr. Dunn performed enucleation, the man being made an out-patient at the end of eight days. The knot was found to have pierced the globe just below the horizontal meridian at the corneo-scleral junction on the inner side, and to have become imbedded in the vitreous.

By careful measurement upon the spot, Mr. Dunn found that the man, when struck, was standing at least six feet beyond the end of the lash of the whip. The explanation therefore, of the accident was, that the knot had become suddenly detached and flown off with great velocity.

Referring to the question of immediate or deferred enucleation for panophthalmitis in such cases, Mr. Dunn expressed himself in favour of enucleating at once, and laid great stress upon the use of thorough antiseptic precautions, both at the time of operation and during the course of the after treatment.

Remarks were made by *Mr. Lunn* and by *Mr. Lang;* the latter expressed himself in favour of deferring enucleation until the inflammation had subsided, giving vent to pus by incisions into the globe.* *Mr. Dunn* replied.

CALCULUS IN A TONSIL.

Dr. Alderson showed a hard concretion, about half an inch in diameter, which had sloughed out of the tonsil of a patient aged 72. There was no history of gout or of a calculus diathesis.

Dr. Ball had seen many calcareous concretions from the tonsils, but not one so dense and brown as this.

LARGE WEN IN THE NECK TREATED BY A NEW METHOD.

In the case of a wen of old standing, and which extended from the jaw to the clavicle, **Mr. Keetley** (President) had operated in the following manner. Removing an elliptical piece, about three inches by an inch and a half, from the cyst wall, he turned out the contents. He then cleansed the cavity thoroughly, first with carbolic lotion (1-40), then with

* This case is fully described and illustrated in the *Illustrated Medical News*, November 10*th*, 1888.

sublimate solution (1-2000), and finally with boracic lotion. The hole in the cyst was then stitched to the hole in the skin, and the cavity of the cyst was plugged with strips of iodoform gauze, which were removed from time to time. At the end of a month the cyst had almost disappeared. During treatment the head and neck had been kept fixed by a poroplastic apparatus, and this probably had had much to do with the successful result.

Ordinary Meeting, held May 4th, 1888. Mr. C. B. Keetley, F.R.C.S., President, in the chair.

PATHOLOGICAL SPECIMENS.—**Mr. Percy Dunn**: (1) The rectum, adjacent parts and portion of the sigmoid flexure, the seat of a large scirrhous growth; (2) Caseous deposit in the right lung of a child of eighteen months; (3) Large hernial sac and testis placed abnormally in the groin and removed during life.

CLINICAL CASES.—**Mr. Bruce Clarke**: A case of multiple exostoses occurring in three members of the same family.

Mr. E. C. H Van Buren: A case of nævoid growth in the lower jaw of a child.

Mr. Swinford Edwards: A case illustrating one cause of failure to cure after operation for fistula in ano.

Mr. Percy Dunn: A case of complete iriderimia.

Mr. Swinford Edwards read a paper on

THE TREATMENT OF PILES BY INJECTION.*

The author gave the results attained by this method in 38 cases which he had treated at St. Mark's Hospital for fistula and in private during the last two years. Of these cases, 10 are still under treatment; 2 have been lost sight of; 9, although still under observation, appear to be perfectly well, and 17 have been cured. Three have remained well for nearly two years, and 14 for periods varying between this and six months. In one case only was there a relapse, and this after a year's immunity. The formula used is carbolic acid, gr. xii.; glycerine and water, of each ℥j. The bowels having been

* This paper will be found *in extenso* in the *British Medical Journal*, October 13th, 1888.

well moved, and the piles being extruded, 3 to 5 minims, or more, of the solution is injected by a hypodermic syringe into the centre of each hæmorrhoid. After all are thus treated they are returned well above the sphincter, and the patient allowed to go home, instructed to replace the piles at once should they prolapse. The injection may be repeated if necessary, at intervals of a fortnight, but in the majority of cases once appears to suffice. As an adjunct to this treatment, it is well to order a laxative iron mixture and an ointment of the subsulphate of iron to be passed well up the rectum before and after each stool. The advantages of this method are that the patient is not laid up, but can follow his usual occupation during the whole course of treatment, suffers no pain, and runs no risk to life. Its only disadvantage is that at present one cannot say how long the cure will last ; for this we must have many more years' experience.

Mr. Keetley alluded to the practical interest of the paper. He considered that it should be quite possible to inject a pile without risk of sending the injection into a vein.

Mr. Herbert Allingham observed that the method of carbolic injection was not radical, although it might cause a certain amount of induration, and lessen the symptoms for a time. In certain cases it might be of some benefit, but in the majority the relief was only temporary.

Mr. Cripps stated that his small experience of the method—only 20 or 21 cases—did not point to very good results. Those cases which he had been able to follow had not all been benefited. One unsatisfactory thing in the method was the uncertainty as to being able to inject all the piles. He also regarded the fact of the patient not being obliged to lie up as another unsatisfactory point. The introducer of the method had himself now—in consequence of a succession of bad cases,—modified his views as to the advisability of the method in all cases. For his part, he was quite satisfied with the ordinary operation of ligature.

Mr. Benham had operated by injection in five cases, none of them severe. He believed that the needle should not be of iron, the possible oxidation causing inflammation. He recommended a poultice after operation, and a pill containing $2\frac{1}{2}$ grs. Socotrine aloes.

Dr. Alderson inquired whether hæmorrhage had ever occurred after the operation by injection. He had always avoided aloes in piles, and was surprised to hear it recommended by Mr. Benham.

Mr. Benton remarked that the question of operation by injection was well considered at the Washington Congress, and the general opinion seemed to be in favour of the older operations and against injection. He did not believe much in partial operations.

Mr. Edwards, in reply to Mr. Allingham, said that protrusion was a prominent symptom in most of his cases, and this had invariably been removed by this method. He agreed with Mr. Cripps that it was difficult in all cases to make sure of injecting all the hæmorrhoids. Mr. Edwards was happy to say that up to the present no accident—such as sloughing, pyæmia, cellulitis, erysipelas, or abscess—had followed his injections, though Messrs. Allingham, Cripps, Kelsey of New York, and others, had encountered one or other of these. In answer to Mr. Benham, the author said, "Cure the piles and the sphincter will recover its tone." He thought it was of the utmost importance to see that the needle, which should have a good lumen, was clean, as also the part to be punctured. Bleeding on withdrawing the needle was insignificant, and stricture was not likely to follow this method unless sloughing of mucous membrane took place, which was not likely to occur if proper care were taken. Mr. Edwards fully agreed with Mr. S. Benton in saying that "partial operations do not bring credit upon the surgeon." He hardly thought this procedure deserved the name of an operation, but considered it a most valuable addition to palliative treatment, and one which often appears to work a cure.

Mr. Keetley read the notes of "A Case in which the Bladder was found in the Wall of a Hernial Sac" in the course of an operation for radical cure of hernia. The viscus was punctured unintentionally, but the puncture having been carefully closed, and care taken that no urine should be left in the peritoneal cavity, the patient recovered without a bad symptom, and was exhibited. It was believed that similar accidents were not uncommon, and two unreported cases, of which Mr. Keetley has received authentic accounts, were referred to. In each of these two a portion of the bladder was cut off, in one case with a fatal result.

THE CAVENDISH LECTURE.

THE ALTERED RELATIONS OF SURGERY TO MEDICINE.

By SIR WILLIAM STOKES, M.D., Ch.M., Univ. Dubl., F.R.C.S.I.,
Professor of Surgery, Royal College of Surgeons, Ireland.

Delivered before the Society, June 1st, 1888. Mr. C. B. Keetley, F.R.C.S., President, in the Chair.

No one having even a limited acquaintance with surgical history can fail to realise the great change that has recently taken place in the status of the surgical branch of our profession, as well as the remarkable alteration that has occurred in the relations it now bears to medicine.

In considering the important question as to the causes that have led to these changes, we may glance briefly at the relations that formerly existed between surgery and medicine. The two branches of our common profession became united in the first half of the fifteenth century, and a conjoint examination for admission to the fellowship of physicians and surgeons was established.* Unhappily, the alliance appears to have been a short-lived one, and the causes that led to the rupture are not very clearly understood, but were, I believe, probably connected with the maintenance of alleged vested rights. The breach was still further widened by the subsequent fusion of the Surgeons' with the Barbers' Company. In this, however, as Sir James Paget has rightly observed, there was not any real fusion, but rather an official junction with a view to the settlement of disputes and the fixing of limitations to the duties and functions of each company.

In the interests not only of the social, but also of the scientific position of the surgical profession, the junction, such as it was, of these two corporations was undoubtedly a calamity, and it helped to give the physicians the vantage-ground which they occupied so long, and in which they were

* See "Memorials of the Craft of Surgery in England." From Materials compiled by J. F. South. London, 1886.

still further strengthened by an enactment made in Elizabeth's reign prohibiting surgeons from prescribing internal medicines. As a proof that the inferior position, socially and scientifically, was maintained up to a comparatively recent period, I may mention a fact which I learned from Mr. Colles, who informed me that his father, Abraham Colles, had stated that at the commencement of his professional career in Dublin, when a consultation on any important case was held, the surgeon was not as a rule permitted to be in the room where the physicians held their deliberations, but, after the consultation was over, he was informed whether his services would be required or not.

The junction not only kept the professions of surgery and medicine separated, but also doubtless had much to say to the long exclusion, or, at all events, feeble recognition, of surgery in the academic systems of the old Universities. It had also another unfortunate result, which was, that when surgery emerged from the Cimmerian darkness in which it had been during the Middle Ages, and its teachers began to recognise the fact that in order to advance something more was to be relied on than the aphorisms of Hippocrates or the dogmas of Galen, there was little sympathy shown to them, and scientific methods of investigation were looked upon generally with suspicion, while the results of scientific research were received almost with contempt.

Although from time to time during the sixteenth and seventeenth centuries there were physicians of undoubted ability and scientific aptitude, still no serious effort apparently was made by the bulk of the profession to strike away the feeble props of the tottering and antiquated tripod on which it had so long rested—namely, empiricism, dogma, and aphorism. The result of this was, that as time went on medicine as a science lost instead of gaining ground in public estimation, and often became the object of satire and ridicule. Of this ample evidence may be found in the writings of many authors and philosophers of eminence, such as Voltaire, Molière, Locke, and many others in more recent times. It was doubtless from observing the faulty way in which medicine was studied and practised that Locke was induced to make the following observation :—" Were it my business to understand physic, would not the safer way be to consult Nature herself in the history of diseases and their cures, than to espouse the doctrines of the dogmatists, the methodists, or the chemists ?"

What was mainly relied on was clinical observation ; and

nothing is more remarkable in the whole history of medicine than the length of time it took before the fact dawned upon the medical mind that clinical observation, when not supplemented by other scientific methods of research, is a lamp that affords in truth but a faint and glimmering light, a shifting quicksand on which it is indeed perilous to build. They did not recognise the truth epitomized by Mill, who has well said, "Observation without experiment (supposing no aid from deduction) can ascertain sequences and coexistences, but cannot prove causation."*

The consequences of too exclusive a reliance upon methods insufficient for purposes of real advancement have been for medicine in the past most unhappy. I allude more particularly to the foundation and advocacy of various systems which prevailed at different eras—of, for example, the dogmatists, eclectics, methodists, pneumatists, astrologers, and alchemists, and in later times to the schools of Cullen, Brown, Broussais, and Hahnemann. All these many outcomes of various phases of opinion have caused the history of medicine to be rather a "succession of cycles, barren hypotheses and fanciful systems," than one characterized by a slow but sure scientific progress. At rare intervals in its history brilliant meteors, no doubt, have flashed across the sky, but their light only tended to make the darkness more visible. They were too far in advance of their time to make their influence felt, and any attempt to supersede the older unreliable methods—to ring out the old and ring in the new—only met with discouragement, often with contempt. My father has often related to me how, when he was a young man and when he introduced into the Dublin school, along with Graves, the methods of physical diagnosis advocated by Laennec and Louis, he was ridiculed, satirized, and even caricatured, by his cotemporaries. I dare say a large proportion of those present here to-day recollect, as I do, hearing various instruments of precision, now in the hands of every educated practitioner, stigmatized as "toys;" and I can even call to mind that a late medical colleague of my own, who rose to considerable eminence in his profession, and who, for the time he lived in, was a skilful histologist, thought it desirable to publish, at the commencement of his professional career, a *brochure* which he entitled "An Apology for the Microscope." But one of the most signal proofs of the low estimate that in former times physicians had of the employment of methods of research now universally used, may be

* "Logic," vol. i. 423.

obtained from the views on pathological histology of Laennec. He observed :—" If the causes of severe diseases are sought for in microscopical alterations of structure, it is impossible to avoid running into consequences the most absurd, and if ever cultivated in this spirit, pathological anatomy, as well as that of the body in a sound state, will soon fall from the rank which it holds among the physical sciences, and become a mere tissue of hypotheses founded on optical illusions and fanciful speculations, without any real benefit to medicine." An unfortunate anticipation, Dr. Hudson observed, as time and progress have proved. When men of the intellectual grasp of Laennec held such views, it is hardly to be wondered at that the rank and file among physicians continued to look unfavourably and with doubt on all such novel methods of research, and under these circumstances it is not surprising that medical therapeusis in the past, and I fear to a certain extent also in the present, has been based too often on that flimsiest and most worthless of all foundations—fashion ; a fact which doubtless suggested to the eminent French physician the sage advice he gave to his pupils, " *Employez vite ce remède pendant qu'il guérit encore !*"

In making these remarks, I trust it will not be considered that I wish in any way to cast discredit on the labours of past physicians in the advancement of medicine, knowing as I do that the very men who were thus sceptical of new methods could always point with just pride to splendid results obtained by them from time to time.

My object is only to account for the fact that in the last century the relations between medicine and surgery were still deficient in cordiality. Old antagonistic traditions and feelings survived, and the breach was only widened for the time by the new departure of surgery into hitherto untried methods of advance, by the renunciation of the *exclusive* reliance on mere clinical observation, and by a general widening of the area of research.

And to whom are we mainly indebted for such development ? This is a question that will at once be asked. Who placed our science on the solid foundation on which it remains, and will ever rest ? Who was it that tore asunder the fetters with which it was bound by a blighting empiricism, and loudly sounded those clarion notes of scientific truth which have their echo still ? He who occupies as a biologist a position above all rivalry, and who by the magic wand of an all-powerful intellect struck the rock from which came the

living water, and evoked the dormant scientific spirit of his age—that beneficent, ever-living and never-failing spirit which, when honestly appealed to, has ever generously responded. It has been said by Malgaigne that in the Middle Ages surgery was a mere craft, that it was made an art by A. Paré and J. L. Petit, but was elevated into one of the noblest of sciences by John Hunter. Animated by no unworthy craving for worldly honour or love of gain, he lit up the dark and rugged paths of that science he loved so well, and to which he devoted his life, with a lamp which shed no borrowed light—one fashioned by ceaseless toil and illuminated by untiring genius. His one aim, the goal he ever strove for, the ambition of his life, was, in the unexplored regions of physiology, surgery, pathology, and anatomy, to unfurl the banner of truth, and, by doing so, to elevate and dignify the profession of his choice, and to render it and its sister branch of medicine one and indivisible. He was in truth—

> "One of the few, Nature's interpreters,
> The few whom Genius gives as lights to shine."

His immediate successors, many of whom were also his pupils—viz., Abernethy, Cooper, Cline, Dupuytren, Colles, and many lesser stars, all worked more or less on the same lines that he did, but not unnaturally with a bias rather towards the clinical and operative aspects of surgery and surgical pathology, than in efforts to advance it by physiological research. But the splendid work of those great surgical leaders I have mentioned cleared and prepared the way for the more complete adoption of Hunter's great principle in advancing surgery, which was, in Sir James Paget's words, that "he brought the scientific method into the study of the practice, and welded scientific knowledge with the lessons of experience." It is the recognition and adoption of this principle in the age in which we live and work that will ever constitute one of its greatest glories. It is one which finds its embodiment in Von Langenbeck's watchword, "From physiology to surgery, and from the microscope to the resection knife." It has mainly been the cause of bringing about the altered relations of surgery to medicine, and happily shattered the barriers between them which in days gone by were such fruitful sources of mischief, and kept our profession divided, powerless, and weak.

The last and most brilliant outcome of the adoption of this principle has been the establishment of Listerian antisepti-

cism, which has enabled the surgeon to bring about not only a degree of perfection and exactness in the comparatively limited field of operative surgery in which until recently he confined himself, but also to advance much farther, and in abdominal and thoracic diseases, and, lastly, in those of the brain and spinal cord, to achieve results that until recently never could have been seriously contemplated. The signal advance into the domain of medicine has not been made in any hostile and intrusive spirit, but solely to render aid—an aid which it must be gratefully acknowledged has happily often been reciprocated.

It has been granted to but few men who have been pioneers in any of the paths of science to have during their lifetime a full recognition of their labours and discoveries, and to see the practical application to human requirements of the new knowledge they had given to the world. Harvey's great discovery met with but a limited acceptance during his lifetime, and the same might be said of other scientists, some of whom, instead of having their views accepted, were persecuted for promulgating them; but many of those who now constitute the scientific vanguard of our profession have been privileged to witness not alone the acceptance of their theories, but also the almost universal recognition of the utility of the practice which has been based thereon; and operative procedures have been undertaken and carried to a successful issue that not very long ago could never have been very seriously thought of; and, lastly, a distinct advance has been made towards that goal desired by all—unity in the science of medicine.

I have already indicated the regions in which operative surgery has so largely supplemented medicine. Did time permit, I would gladly dwell more in detail on what it has effected in this direction, such as the surgical treatment of pulmonary abscess, antiseptic paracentesis in pleuritic effusions, empyema, and pericardial effusion. Also in abdominal surgery, including exploratory operations in an excision of the kidney, removal of renal calculi, operations on the gall-bladder, on the intestines for obstruction, excision of the pylorus and other portions of the intestinal tract for cancer, and the many operations connected with the female organs of generation.

In connection, however, with a region that, until recently, has been held to be the exclusive province of the physician, I should like to speak very briefly. I allude to certain lesions of the brain, and the means we have at our disposal for their

localization. It is a subject of absorbing interest, and exercises largely, as you all know, the professional mind at the present day. There is no wonder that it should do so, for our anticipations as to what may eventually be done in this direction are full of hope and confidence. Having regard to the results already obtained, these are not, I feel assured, misplaced. But, still, cases do occur, and one of them was recently in my own practice, which strikingly bring home to us the undoubted and unhappy fact that, notwithstanding the admirable work achieved by Professors Ferrier, Yeo, Schäfer, Victor Horsley, Munk, Goltz, and others, in reference to the localization of brain function, we must admit that we are still only on the fringe of the inquiry, so to say, and that much, very much, has yet to be done before any definiteness can be said to exist in the means at our disposal for the accurate appreciation of many of these cases. This will not, I believe, be determined with sufficient accuracy until much more light than is at present available is thrown, not only on cranio-cerebral topography, but also on the localization of cerebral function. We are undoubtedly much nearer finality in the former than the latter, although the difficulties in the path are still extreme. The relations between the lobes and convolutions of the brain and the enveloping bones vary in different periods of life, and up to a certain age the growth and development of both do not proceed *pari passu*. The frontal eminence, as Cunningham, Topinard and Feré have shown, overlies a different portion of the frontal lobe of the brain in the adult and child, and the relations between the Sylvian fissure and the squamo-parietal suture, as first noticed by Foulhouze, also vary in different periods of life. Remarkable changes in the temporo-sphenoidal lobe have also been observed both as regards its position and form, as age advances from childhood to adolescence. For example—as may be seen in these preparations—in the adult the frontal eminence corresponds to the first frontal fissure; in childhood the frontal eminence is found at some point upon the second frontal convolution, and occasionally on the third. Again, the Sylvian fissure varies in relation to the squamo-parietal suture. In the adult it may correspond to it, or be placed immediately above or slightly below it, but in childhood it is always found considerably above it. The high position of the fissure in childhood appears to be due to a twofold cause—one, to the low stature, if I might so express it, of the squamous portion of the temporal bone, which afterwards grows upwards towards the fissure;

and secondly, that at the earlier period of life there is relatively a much greater area of the temporo-sphenoidal lobe in relation to the vault of the cranium. This is seen when compared with the outer surface of the parietal lobe. The method of topographical localization, when the relations are more fixed or constant, as in adult life, suggested by Hare, gives for practical purposes undoubtedly the best and most accurate results.

As regards the localization of function, however, it is regrettable that even between very high authorities so much difference of opinion exists, and that the whole subject is consequently in such an unsettled state. Take, for example, the temporo-sphenoidal lobe. According to Professor Ferrier, we have here the situations of tactile sensibility, hearing and taste, whereas Professor Schäfer holds that none of these are so placed. Again, the centre of sight has been localized by Munk and Schäfer in the occipital lobe, but Goltz has shown that this lobe can be removed without impairing vision, and that removal of the frontal lobe is attended with loss of sight.

Our clinical experience, too, at times adds largely to the difficulties we have to contend with in our endeavours to accurately appreciate the situation of cerebral lesions. I allude to cases in which we have motor disturbance without appreciable lesion to account for it, and the reverse—cases in which morbid conditions, profoundly involving the motor areas, exist without causing any motor or sensory trouble whatever. In illustration of this, I may mention the leading particulars of a few cases, and in doing so trust it will not be supposed for a moment that I wish to depreciate or detract in the slightest degree from the great value of recent investigations in reference to the localization of cerebral function.

The first of them that I would mention was one which was quite recently under my care in Richmond Hospital, and was of exceptional perplexity.

J. O'D., aged forty, a law clerk by occupation, and for many years of intemperate habits, was recently under my care in the Richmond Hospital. Two days previously to his admission he had been drinking to excess in a neighbouring public-house, and for making a disturbance on his way home was arrested. In the encounter which ensued with the authorities, it was said he was struck with a baton on the forehead, over the left eye. He was stunned by the blow, but soon recovered. On the second day after receiving the blow he suffered pain, which was chiefly referable to the forehead, and in the

evening he became heavy and drowsy. The day following he was aphasic, and he was then brought to the hospital. On his admission, a contused wound was found over the left eyebrow, and much subconjunctival ecchymosis. When speaking, he was unable to form a complete sentence, failing generally to find the required verb. When the word he wanted was suggested to him, he at once recognised it, but was unable to repeat it. He conveyed that he could remember the word he wanted easily, but could not say it. When shown a watch he was able to tell the time accurately and without hesitation; but when asked to write a sentence he failed, and wrote some disjointed words, but was able to write his name. In the evening the aphasia was more pronounced. He could tell the name, but not the address, of his employer. He said it was the same as a Christian name. On going through a list of names, he at once recognised the one he wanted when George's Street was mentioned. There was no paralysis at this time of upper or lower extremities. Next day it was found that speech was completely lost. There was rigidity of the muscles of the jaw, and he was quite unable to open his mouth. The left fore-arm and hand were paralyzed, and fingers clenched. The scapulo-humeral muscles on the left side were only slightly affected. He could grasp firmly with his right hand. The left pupil was irregularly dilated, and did not react to light. Vision was lost in it, and there was slight ptosis. When given a pencil and paper he could write his name, but very indistinctly. Patellar and plantar reflexes were well marked. The day following his condition was worse. In the evening he had an alleged rigor, which probably was a convulsive seizure. Next day all the symptoms were still more pronounced; the patient was now in a semi-comatose state, jaws rigidly closed, his respiration blowing, accompanied by constant grinding of teeth. Throughout his condition was perfectly apyrexial.

With such a history and train of symptoms, the conclusion was unavoidable that they were produced by mechanical pressure. The patient, who had never before manifested symptoms of brain disease, had received a severe blow on the left side of his head. This was followed by progressive motor aphasia, an irregularly dilated pupil, loss of vision, sub-conjunctival ecchymosis, ptosis, blowing respiration, rigidity of the muscles of the jaw, paralysis of left fore-arm and hand, a convulsive seizure, and, lastly, coma. These symptoms seemed to clearly point to mechanical surface pressure over

the left motor area, over or in the neighbourhood of Broca's convolution, followed by basic complication, as evidenced by the implication of the third and fifth pairs of nerves, producing the symptoms referable to the eye and the muscles of the jaw; and, lastly, there was paralysis of the fore-arm and hand, which latter was the great difficulty in the case. The pressure, either hæmorrhagic or inflammatory, I believe, primarily involved Broca's lobe, and the basic complications I considered were probably due to extension of the effusion.

Having regard to the fact that the patient was clearly *in extremis* and that trephining gave him what might be termed the shadow of a chance, I operated, and removed a disc of bone, over Broca's lobe, and the result being negative, I removed another a little farther back. Neither operation revealed a source of pressure. The patient died the next morning, and the result of the autopsy was as negative in its results as the operations had been. There was neither hæmorrhage nor abscess; the brain substance was whiter and harder than normal—the condition observed so often in alcoholism. The only tangible changes observed were evidence of arachnoid inflammation, which was all the more remarkable, having regard to the apyrexial condition of the patient throughout, and also a thickening and adhesion of the meninges over the upper portion of the right motor area, which presented no signs of recent development, and under which was a small patch of softening about the size of a large pea. A careful examination of the cerebral vessels failed to give evidence of the existence of embolism.

In this most remarkable and exceptional case, in which so many of the symptoms of cerebral pressure supervened on the receipt of a severe injury, it was, indeed, as surprising as it was disappointing to find that they depended on some condition independent of mechanical pressure, and it proves how far we are still, even when the symptoms are signal and pronounced, from being able in many instances to correctly estimate the phenomena in cases of cerebral lesion, and especially in those having apparently a traumatic origin.

Dr. Bennett has drawn attention to a remarkable case of mono-crural paralysis, which was under the care of a disciple of Professor Ferrier, and the site of the supposed central lesion was carefully indicated on the skull. Subsequently the patient was under Dr. Bennett's care for epileptic seizures, which ultimately proved fatal, and which were attributed to renal disease. Having regard to the mono-crural paralysis,

a careful post-mortem examination was made, but without discovering any evidence of a lesion either of the brain or its coverings.

We have, too, on the other hand, cases recorded in which there has been marked intracranial disease invading the motor zones, but without producing any motor disorder, as, for example, in the remarkable case of subarachnoid cyst recorded by Professor Cunningham.* In this case the cyst—one of exceptionally large dimensions—was limited in front by the Rolandic fissure, below by the parallel fissure, above by the intra-parietal fissure, and posteriorly it reached the occipital lobe—and yet in this case there was no evidence whatever of impairment of motor or sensory power. Another case, illustrative of the fact that serious lesions, involving the motor area, may exist without producing paralysis, is one recorded by Dr. Byrom Bramwell. In this a large sarcoma, growing from the dura mater, "had apparently destroyed the greater part of the motor area on the right side. So far as one could judge with the naked eye, the whole of the motor centres in the face and upper extremity were destroyed, and on microscopical examination the gray matter in this region seemed to have completely disappeared; and yet there was absolutely no paralysis.'†

From these interesting but somewhat dispiriting facts—which, unhappily, remind us of the dense mist in which we are still surrounded—let us glance at the bright side of the picture, and consider some of the cases that give us encouragement, and tend to restore confidence.

The first I would allude to are four cases of subcranial hæmorrhage, which have recently occurred in Dublin, and for which the operation of trephining was performed. In all four cases the condition was correctly diagnosed, and in three of them the hæmorrhagic effusion was reached and removed, and the treatment followed by immediate relief and ultimate recovery.

Two of these cases presented features of exceptional interest. In the first, which was under the care of my colleague, Mr. Thornley Stoker, the patient had sustained a fall off a cart nine days previously to the operation, and was at the time of its performance in a state of complete left hemiplegia, was comatose, and the respirations twelve per minute. The diagnosis which was made, and proved after-

* *Journal of Anatomy and Physiology*, vol. xiii., p. 508.
† *British Medical Journal*, April 21, 1888.

wards to be correct, was that hæmorrhage over the right motor area, due to laceration of the middle meningeal artery, and probably associated with fracture, had occurred and produced at first partial left paralysis, and that the increased hemiplegia which subsequently occurred was due to renewed hæmorrhage. Trephining was performed over the fissure of Rolando, and the hæmorrhagic effusion reached and successfully removed ; this was promptly followed by relief, and an uninterruptedly good recovery was made. The case is of special interest in one particular, being signally illustrative of the doctrine of Ferrier, that the absence of anæsthesia is, in such cases, indicative of the lesion being limited to the motor zone, and the brachial monoplegia also pointed to this alone being implicated.

The second case, which was under Mr. Ball's care, was one of motor aphasia, which came on after the patient had received a blow on the head with an open penknife ten days previously to his coming under observation. The cicatrix of the wound was over the squamous portion of the temporal bone. There was an absence of any paralysis of the voluntary muscles, but the aphasia was distinct and progressive—both word-blindness and word-deafness being well marked. Trephining was performed, and the wound was found to have been a penetrating one, involving both bone and dura mater, and a small subdural blood-clot was removed, which it was believed was situated in the Sylvian fissure. The recovery in this case was complete. In a third case of subcranial hæmorrhage, which Mr. Thomson has recorded, the operation of trephining and the removal of an epidural blood-clot was attended with an equally satisfactory result.

As a remote result of intracranial hæmorrhage, another case, which was under the care of Mr. Kendal Franks, is noteworthy. The patient was a young man, aged twenty-five, who commenced to suffer from severe epileptic seizures six years after he had sustained a fall on the top of his head from a height of nine feet, and was treated by bromides continued without intermission for over a year, but without influencing the attacks, except occasionally to lengthen the interval between them. Trephining was performed, and a subdural blood-cyst, pressing on the left frontal lobe of the brain, was discovered. The cyst was then cleared out and drained. Immunity from the seizures for three months was the result ; there was then a recurrence of them, but they were much slighter than before. A second trephining was then per-

formed, and although the result of this was negative as regards disclosing anything further to cause cerebral disturbance, the condition of the patient since the operation has been most satisfactory, and he is now apparently free from the attacks, which formerly were of such frequent occurrence.

In two cases of traumatic cerebral abscess—one epidural and the other subdural, and both of them illustrative of the pathological fact first noticed by Dease as to the late appearance of cerebral trouble after cranial traumatisms—I trephined, and in one of them the result was very remarkable. The operation was performed seven weeks after the injury, which was a blow over the left temple. At the time the operation was performed the patient was clearly *in extremis*—motor and sensory paralysis complete, and coma, following convulsive seizures, profound. On raising a disc of bone at the situation where the injury was received, no pus was to be seen, and on laying open the dura mater the result was equally negative. I then passed the needle of a hypodermic syringe into the brain substance as far as it would go, and to my great satisfaction found, on drawing up the piston of the instrument, that I had reached the abscess. I removed an ounce and a half of pus, and then washed out the cavity with a weak carbolic solution. The relief obtained by the evacuation of the abscess was immediate, and before the patient left the operating theatre he was able to articulate distinctly. His recovery was rapid and uninterrupted, and he returned to his usual avocation, which was that of a plasterer. As regards the situation of the trephine opening, I may mention that it was three-quarters of an inch to the left of the mesial line, and an inch in front of the coronal suture. It corresponded to a point close to the junction of the supero- and meso-frontal convolution. After evacuating the contents of the abscess cavity, in order to ascertain the size and direction of the latter, I passed the little finger of my left hand cautiously into it. By doing so I was able to ascertain its limitation anteriorly, laterally, and inferiorly. Externally and inferiorly its limitation must have been formed by Broca's lobe, but posteriorly and inferiorly, although I passed my little finger in as far as it was possible, the limit of the cavity was not reached, and my belief is that the abscess possibly involved the lateral ventricle.

The final outcome of this remarkable case, if disappointing, is of much interest. For nearly nine months after the operation the patient remained perfectly well, and quite able to

follow his usual avocation. It was then stated that he got a "fit," from which he recovered, and he returned the following day to his work. The morning after this he was found in bed in a state of complete insensibility, and he was then brought for the second time to hospital. Right hemiplegia was complete, and both plantar and patellar reflexes lost; his face was pale, but lips deeply cyanosed. Pulse, 160; respirations, 60; temperature, 101·8°. He had frequent convulsive seizures after he came to hospital.

Thinking it possible that the symptoms might be due to the formation of a second abscess, I reflected the flap I made originally at the trephining operation, and, on opening the dura mater, through some thickened cicatricial tissue, gave exit to some bloody serum; I then passed a blunt-pointed director downwards and backwards to a distance of 5 cms., but did not reach any pus or other fluid. A director was then passed downwards and slightly forwards, when a considerable quantity of serous fluid came gushing out. From this situation I removed ʒ vj. of sero-sanguineous fluid dotted with white-coloured flakes. The effect of the operation was to reduce the pulse from 150 to 100, and the temperature from 105·1° to 104·6°. The patient, however, never rallied, and died the day following.

I might dwell on other cases of cerebral abscess illustrative of the beneficial results obtained by trephining and drainage, more particularly that published by Dr. Gowers and Mr. A. Barker, where the abscess occurred in the temporo-sphenoidal lobe, and depended on otitis media, and Dr. Greenfield's, which also depended on the same cause. Trephining and evacuation in both these cases were attended with the best results.

The operative efforts in cases of abscess, tumour, and epilepsy, of Professor Victor Horsley, Mr. Alexander, Dr. M'Ewen, Mr. Godlee, and Dr. Roberts, of Philadelphia, are such as to give the greatest encouragement and hope that in the near future we may be able to undertake the operative treatment of such cases with a confidence we cannot yet possess.

There are many points of interest connected with these remarkable operations that I have mentioned which, did time permit, I should like to dwell on. But, in truth, the discussion, in any minute way, of the technicalities of either the diagnosis or therapeusis of such cases seems, on an occasion like the present, hardly appropriate; such being more suitable for

consideration at the ordinary meetings of your society, where, in the scientific crucible, the golden ore of experience and research is tested, and the pure metal, that having the genuine ring of truth in it, is elicited and refined.

From what has been said it must be conceded that surgery can no longer hold in any sense the subordinate position to medicine which she occupied so long. So far, at all events, as physical conditions are concerned, surgery has undoubtedly advanced medicine in no small degree, and in doing so accomplished much in the direction of dispelling the factitious and unreasonable division of the two branches of the profession. It has also been its safeguard against irregular and unrecognised lines of practice, for no important surgical proceeding can be based upon such—at least, in the public mind.

At the same time we must acknowledge that, of late years at all events, surgery is indebted to medicine. From Professor Ferrier's work, for example, brain surgery has to a large extent been the outcome, although without Listerian antisepticism little of what was done could have been accomplished. One of the best instances that could be mentioned of the good results that have been obtained by the combined work of a physician and surgeon is that of Dr. C. Allbutt and Mr. Teale, of Leeds, whose researches on scrofulous cervical glands, pulmonary abscess, and other conditions existing on the boundary line—one every day increasing in breadth—between medicince and surgery, are doubtless familiar to all present. In truth, the more investigation is pursued in this direction, the more likely is it that surgical possibilities in many other medical cases than those I have mentioned will become recognised. One of the immediate and most salutary consequences of this overlapping or fusion of our work has been the gaining for the profession at large of a vast increase of influence and public confidence; more, it may be safely said, than has been gained by any of the other professions in the same time, and which has been obtained not because it has mastered so many of the secrets of disease or injury, but, as an eminent living statesman has observed, "because the world was well aware that the very highest of human abilities were addressed in ample quantity to the business of the profession, and that their abilities were addressed to it with all the zeal and all the judgment which they could expect from human capacity and assiduity in any of the pursuits of life."

And now, what next? Are we on the threshold of unex-

plored regions of research, or have we arrived at the hopeless deadlock of finality that some maintain we have reached? We should reject so disheartening a suggestion, and fearlessly pursue our course, relying not alone on biological research, but also on improvement in surgical precision and of surgery, more particularly in its operative aspects.

As regards the future progress and development of medicine, it has been said by an eminent scientist, but I think unphilosophically, that present research forces on us the conclusion that in order to appreciate the etiology and prevention of disease we must in future rely rather on chemical than on biological investigation; but considering, among other things, the results obtained by the recognition of parasiticism as an etiological factor in the production of disease, and the great probability of being able in the near future to recognise it as such in affections in which it has not yet been demonstrated, it is clear that we must not rely exclusively on either one or other of them, but rather on the outcome of researches in the many branches of natural science on which both medicine and surgery are based.

But there are other things we should do as well as not do. Among the latter, we should not yield to the tendency that exists in the present day to abandon the principle of unity of research, and to run into narrow specialistic grooves of work.

In certain branches of surgery and medicine, just as in law and in other departments of human learning, specialism is doubtless not only inevitable, but useful; but it is when there is undue extension of the principle that the harm is effected, leading, as it doubtless does, to what has been so well termed by Dr. Richardson a "centrifugal disintegration"—one which is tending to tear our science into shreds. It has been said by the apologists of specialism, that what it loses in breadth it gains in depth; but it should be remembered that it is not always the deepest wells that furnish the clearest and best water; nor in mining operations is it the narrowest shafts that always lead to the purest metal.

Another error that is too often made, and which is fraught with peril to true advancement in surgery especially, is the premature publication of cases, and the danger that exists in consequence of drawing erroneous conclusions therefrom. In illustration of this I would allude, among other examples that might be mentioned, to the records that have appeared so often of alleged successful results obtained after operations for lingual cancer. It must be admitted, by all possessing

operative experience, that there are few surgical procedures that, as a rule, in their ultimate results are so disappointing as these. This disease seems, in truth, like an impregnable fortress, for ever proof against the sternest artillery of our art, an invulnerable enemy that apparently may be vanquished, but never conquered. To those who give unquestioning credence to the roseate statistics, so frequently published, of the treatment of cases of lingual cancer—cases in which permanent relief is too often triumphantly stated to have been obtained—this may, perhaps, appear too discouraging a picture ; but these published results are, as a rule, so distinctly opposed to my clinical experience, that on reading the records alluded to, in which success appears to be the rule and the want of it the exception, it is hard to avoid surprise and regret that so many have been found to prematurely publish records which, my belief is, are of necessity misleading. The custom of too early publication of such cases is the main factor in preventing a true estimate being formed of the value of such interference, and must tend to damage the worth of statistics as a means of establishing surgical truth.

In reference to this point, Sir James Paget's words are very applicable. He observes, speaking of what good operative surgery may do when practised with prudence in the treatment of malignant disease—" It does not do all we want ; the disease returns even after complete removal of the diseased parts. All that is locally wrong may be removed, the local portion of the disease may be deemed cured, but something remains or after a time is renewed, and similar disease reappears, and in some form or degree is usually worse than the first, and always tending towards death." *

I hope I shall not, in making these observations, be understood as in any way depreciating operative surgery in such cases. Far from it. It sometimes cures, usually prolongs life, at all times gives relief ; but in reference to cancer and its treatment it must, I fear, be confessed that as yet " we see through a glass darkly." We have only reached a sort of halfway house on the road, beyond which we are not likely to get until many of the problems connected with the disease are elucidated, such as the relations, if any, which exist between it and other specific diseases, notably syphilis ; how far we are justified in regarding it as primarily a local disease; the nature of the *materies morbi* or microbe, or whatever is the agency that develops the phenomena of cancer ; and

* " On Cancer and Cancerous Diseases," p. 25.

again, if the disease has a parasitic origin—and probabilities seem to point in that direction—to determine what are the circumstances which at one time render the organismsquiescent, dormant, and apparently harmless, and at another time which rouse them into dangerous activity. These, as well as many other problems, must be solved before the therapeusis of cancer can be placed on a sure and scientific basis.

In connection with the all-important question of the origin of cancer, it has often occurred to me as remarkable that the question as to what part syphilis takes in its development has not been more frequently a subject of consideration. I confess to a growing conviction, based on a tolerably long clinical experience, that in the early life-history of cancer it is not so much a direct etiological factor, so to say, but rather tends to promote a condition favourable to the development of the entity, whatever it may eventually prove to be, which plays so important a *rôle* in the first act of a drama which, as a rule, has so tragical a termination.

Recently Professor Lang, of Vienna, has drawn attention to this subject, and has given the particulars of a series of cases which illustrated the tendency to the development of carcinoma on a syphilitic base, and he alluded to similar cases recorded by Mr. J. Hutchinson and Professor von Langenbeck. My colleague, Professor Hamilton, has also detailed to me the history of two remarkable cases which were signally illustrative of the development of cancer occurring during the treatment for secondary syphilis, the disease appearing in the groin and running a rapidly fatal course. Did time permit, I could also adduce instances illustrating the close affinity between the two diseases. I allude more particularly to cases of ulcerated lingual gummata, which ultimately presented the characters, clinical as well as histological, of epithelioma. In reference to this subject Mr. Hutchinson observes :—"The statistics are wholly wanting as yet which would enable us to give any confident opinion as to whether the damage the tissues receive from a syphilitic infection makes them more prone than before to take in the erratic modes of growth which constitute cancer. In the case of the tongue the association of the two is so common that it is difficult to avoid an impression that syphilis must exercise some degree of predisposing influence." * Mr. C. Heath also is of opinion that one of the causes of the increase of cancer of late years—a fact noted by the Registrar-

* "Syphilis." By J. Hutchinson, 1887.

General—is the greater spread of syphilis.* If these views be ultimately endorsed—and who in the present state of our knowledge can say they can not?—how largely does it add to the imperative duty that devolves on us to make, with all the powers at our disposal, efforts to dissipate the public prejudice that exists to bringing about a re-enactment of, I trust, the temporarily laid aside Contagious Diseases Acts, and how greatly does it intensify the grave responsibilities of all who unhappily, under the baneful influence of that mischievous sentimentalism which has done so much to sap the judgment and good sense of so many men as well as women, thwart and hinder efforts which, when made, have been proved to all unprejudiced persons to be fraught with good to mankind, not merely now, but for untold ages to come!

The elimination of this dread scourge of the human race is not a national—it is a cosmopolitan question. It is one not so much for the therapeutist as for the statesman. "The time has come," said Marion Sims, "when we can no longer shut our eyes to its evil influences, and we must deal with it plainly, as we deal with other great evils that affect the general health of the people. If yellow fever threatens to invade our precincts we take steps to arrest its progress at once. If cholera sounds the alarm we immediately prepare to defend ourselves against its ravages. If small-pox infects our borders we circumvent and extinguish it. But a greater scourge than yellow fever and cholera and small-pox combined is quietly installed in our midst, sapping the foundations of society, poisoning the sources of life, rendering existence miserable, and deteriorating the whole human family."

I might adduce much, and, to unprejudiced minds, conclusive evidence, as to the beneficial effects of the Acts in protected districts, not only as regards the diminution of the disease, but also in reference to the good moral effects of them, but on the present occasion I will, in connection with the former, content myself by mentioning one fact. It is mentioned in an able paper on this subject by my colleague, Mr. W. Thomson.† In 1874 the 50th Regiment came to Dublin, an unprotected station. It was previously for seven months at Aldershot and Colchester, protected stations. The length of time was practically the same that the regiment spent in both the protected and unprotected stations, as was also the average strength of the regiment during the two

* *British Medical Journal*, April, 1888.

† *Medical Press and Circular*, April 30, 1879.

periods. The admissions per 1,000 men, while protected, for syphilis were 11·97, and while unprotected 118·81, and it should also be stated that during the first period there was the adverse influence of 13 per cent. fresh recruits, while there were no enlistments in the second. Other facts equally striking could be mentioned, proving how potent for good the Acts might be made ; but the one I have adduced speaks, in my opinion, trumpet-tongued in their favour.

But encouraging as the results of the Acts have been, it is not from such partial legislation as that contained in them that we can look for any great or permanent improvement. This need not be expected until statesmen and philanthropists of all nationalities shall combine in endeavouring to crush the enemy in our midst, that every day brings in its train disease, destitution, and death, not alone to the guilty, but also to the guiltless, and transmits a bitter inheritance of sorrow and suffering to the innocent yet unborn. And yet to the efforts made to mitigate or stamp out the disease the strongest opposition is made by those "friends of humanity," whose perverted notions of right and religion make them give an insensate opposition to a movement which, if carried out effectively, would put such a check on immorality and diminish so largely disease among all mankind. When we consider the suffering, blighted hopes, and loss of life that the disease unchecked carries in its wake, we cannot but realize the fact that although sentiment is a mercy, it may be one that for a nation is the most costly—and for humanity the most cruel.

The task of dissipating many of these prejudices and errors of persons of doubtless good intentions as a rule, but of weak intellectual fibre, and which, in more than one instance, have culminated into what has become a real calamity for mankind, is one that all can undertake, no matter what their abilities or mental powers may be. If it be not possible to have a position in the scientific vanguard of our profession, much may be done in supplementing the work of those whose strength and whose work have enabled them to get there. Men of much creative genius are, as they ever have been, rare in their generation. But those without this may not the less be "true sons of their century," for it is the men of order, the men who work with method, earnestness, and truth, that do the great mass of the world's work. If they have not strength to carry a votive tablet to the Temple of Truth, they can at all events assist in fixing and cementing

it; and fortunate it is that such is the arrangement made by the One Perfect Workman, for it shows us the importance, nay, necessity, of mutual help which must exist so long as men's qualities, mental powers, and tastes are so diverse.

In future, the relations between surgery and medicine being now so happily altered, the physician and surgeon will work in unison, the labours of the one supplementing those of the other, their mutual jealousies and differences forgotten, or relegated to the hazy traditions of a past that has but little interest to anyone, save, perhaps, the historian or the antiquary. This union for the good purposes of mutual help will bring us increase of strength, of confidence, and hope, and assuredly prove that we are all, so to say, of the same guild, all animated by the same worthy ambition, by the same desire to "allow," as Lord Bacon said, "the spials and intelligencers of nature to bring in their bills," and all animated by the same fair aspiration to discover, collect, and replace the scattered fragments of that precious crystal of Truth, which, it has been said, fell from, and was given to us from, heaven.

RETIRING PRESIDENTIAL ADDRESS.

Delivered at the Annual Meeting, held June 29th, 1888.

By Mr. C. B. KEETLEY, F.R.C.S.

THE RESPONSIBILITY PLACED ON THE PHYSICIAN AND GENERAL PRACTITIONER BY THE MODERN PROGRESS OF SURGERY.

Gentlemen,

The eloquent Cavendish Lecture, recently delivered before our Society by Sir William Stokes, dealt with the altered relations of medicine and surgery to each other, and called attention more especially to the marvellous increase which has occurred in our times of the power of surgery to cure internal diseases and deeply-seated injuries.

I would like to recur to the same subject, only less broadly, confining these remarks to certain points. If the fullest and most successful use is to be made of the increased power of surgery, it is absolutely necessary that there shall be cultivated to the utmost the systematic co-operation of the physician with the surgeon. In the term "physician" is included the general practitioner, who cannot be more accurately described by any name than that of "family physician." A second necessity is that there should spread widely throughout the whole profession a good working-knowledge of the earliest symptoms of such affections as intestinal obstruction, perforation of the appendix vermiformis, or of other parts of the digestive tract, rupture of the stomach, or of the bladder, or of the kidney, renal calculus, peritonitis, perityphlitis, the various affections of the female generative organs, amenable to surgical treatment, and, passing to another part of the person, intra-cranial abscess and hæmorrhage and tumour. This anything but exhaustive list is given by way of example. Now, how many men are there in this room, how many are there in this city, how many in Great Britain, who have as

good a practical knowledge of the diagnosis of, say, not only intra-cranial abscess, but even of renal calculus and acute intussusception as they have of typhoid fever and of pneumonia? Let our own consciences reply. And yet these things which are so obscure to many of us are not so exceedingly rare; they are also terribly fatal, but wonderfully remediable by correct surgery *promptly applied*, while such diseases as pneumonia and typhoid often require no active treatment whatever. At all events, in dealing with the latter, a policy of waiting until the diagnosis is clear may do no harm.

But in the case of almost all the acute, and some of the subacute, internal diseases now brought into the province of surgery, to wait is to be lost. I would like to go into detail and tell of case after case in which the surgeon was appealed to by the practitioner, or even by the consulting physician, only when the shadow of approaching death had already crept over the patient. But as each case would be recognisable by those who had to do with it, there would be danger of appearing to reproach individuals, and to reproach at all is the last end I have in view. I know too well, and feel too strongly, how intensely difficult is the path we have to tread, how inaccessible the ideal goal at which we should aim. Nevertheless, let us set up this ideal, and with kindness and earnestness encourage each other to struggle onward towards it.

A first word of encouragement with regard to cases of intestinal obstruction is this: It is almost always, when once the abdominal cavity is opened, easy to speedily discover the exact nature, locality, and anatomical extent of the trouble. Such manœuvres as passing yards of small intestine, inch by inch, through the fingers are things to read about in books and avoid in practice. Often an intussusception can be felt at once; many have been discovered through the abdominal wall or per rectum before the operation. The first coil of intestine that appears in the wound, frequently, by its inflamed appearance, growing fainter in one direction, and more intense in another, guides straight to the constricting band or other source of mischief.

Secondly, the seat of disease or injury once found, it can usually be easily reached and dealt with, in whatever part of the abdomen it may be. For instance, although the promontory of the sacrum and the right sacro-iliac synchondrosis cannot be dragged out of the abdominal incision, the latter can be pressed backwards towards them. Let no one, there-

fore, be deterred from counselling operation for intestinal obstruction by the idea that the seat of disease will be either difficult to find or to get at.

Thirdly, an abdominal exploration, properly conducted, in a case not too far gone, can be made with almost absolutely no danger. Here is a typical example: Some years ago a man was admitted into W. L. H. ward of the West London Hospital with symptoms, recent and not severe, of strangulated or obstructed hernia. It was thought that the contents of the sac might be hooked back easily from within the abdomen. Two fingers were inserted through a small opening in the linea alba and the attempt made. As much force was used as was reasonable, but in vain. Then a regular ordinary herniotomy was done, and omentum found adherent to the fundus of the sac, which accounted for the irreducibility *à tergo*. The sac and omentum were excised. Recovery was as quick and uncomplicated as could be. The median abdominal incision produced no ill-effects whatever. Now let us suppose that the same man had had similar symptoms, but no hernia. He would have been a type of those cases in which there are suspicious, but not conclusive, signs of intestinal obstruction. Better that twenty such barren explorations should be made than that physician or surgeon should sit down and watch one genuine case of intestinal obstruction steadily and surely perish. But even in the practice of the most inveterate discoverer of mares' nests, no such proportion of barren explorations to successful operations would occur. There would more likely be twenty of the latter to one of the former. For, really, the serious cases are generally plain enough, even after a few hours. The acute pain, the gushing vomit, the collapse, the constipation which mark acute obstruction, do not form a collection of symptoms which are every day seen to clear themselves up. And there is usually a significant history to help to the diagnosis of a case of chronic obstruction.

With regard to acute obstruction, the case is well put by Mr. Greig-Smith in his most interesting and valuable work on abdominal surgery. "At once, or within a few hours, we ought to make a definite diagnosis. If we are convinced that it is acute obstruction, then operation should be performed at once: if we are convinced that it is not, another treatment equally definite ought to be pursued. From the beginning a definite plan of treatment ought to be laid down, and this plan ought to be adhered to. Let it be either drugs

or operation, and never that fatal compromise—operation when drugs fail."

In the surgery of the brain, to which Sir William Stokes particularly called our attention by his narration of his own instructive cases, quick diagnosis is not of so great importance as correctness, especially in the matter of localization. But it is possible to throw very valuable time away, and especially in the treatment or neglect of surgical treatment of some of the ear diseases which lead to so large a proportion of the cerebral abscesses which occur. And correct localization is often greatly assisted by careful observations of where such symptoms as paralysis and spasms *begin*. The earliest of these symptoms are the most valuable. When the progress of the case has made paralysis more or less general, then the symptoms no longer point to a particular centre.*

In general surgery it is equally important, if full advantage is to be taken of the improvements made by Lister and others, to act in time. Volkmann introduced the practice of classifying amputations, for statistical purposes, into "complicated" and "uncomplicated," the former being such as those in which pyæmia previously existed. In the class of cases termed "uncomplicated" the improvement in results which has followed the introduction of Listerism is well-known to be wonderful. Not so with regard to "complicated" or pyæmic cases. These do very little better now than formerly.† It is, even in 1888, still useless to lock the stable-door when the horse is stolen. In short, gentlemen, antiseptic surgery can do marvels, but not miracles. In order that it may do successfully its mighty share in the salvation of human life, and the alleviation of human misery, it requires primarily and essentially an extensive and sound knowledge of symptoms and power of diagnosis on the part of the great body of the profession. This task of early diagnosis may be, in fact is, difficult, but it is honourable exactly in proportion to its

* A patient with suspected lesion of the brain or its membranes should be attentively and frequently watched, as the first symptoms of cerebral irritation, *e.g.*, convulsions, give the most valuable indication of the localization of the injury; also the temperature should be taken frequently, as an ominous rise may be sudden and rapid. Dr. Robertson, of Glasgow, thinks an intelligent observer should be in constant attendance on such cases.

† For instance, Billroth's statistics show a gradual decline of the death-rate after major amputations in non-complicated cases from 35·1 per cent. to 5·7 per cent.; but of "complicated" he still lost 10 out of 17.

difficulty. The acute, well-read, observant, and thoughtful man who diagnoses and localizes a cerebral abscess, whether he be consulting physician or country practitioner's apprentice, deserves more credit than the surgeon who, proceeding by rule of thumb, just as he would if carving a turkey, lets out the pus. The general standard of medical attainments is not now what it was, and the time is gone by when the highest ambition of practitioners was thought to be duly satisfied when, in the history of a case, they were merely named as having sent it to the consultant.

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THE END.

London: Baillière, Tindall, and Cox, 20 King William Street, Strand.